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ABSTRACT

The conference papers in this publication focus on the interrelationship between change in the education sector and change in the wider society. The papers were generated by an invitational conference held in 1980 to mark the golden jubilee year of the Australian Council for Educational Research. While many of the papers have an Australian orientation, the issues which they raise are relevant to most modern societies experiencing a period of rapid economic, political, and social change. The contributors include Australian, European, and North American scholars as well as Australians prominent in the fields of industry and trade unionism. The first two sections of the publication contain background papers and reaction statements to them. Topics include theoretical assumptions in the recent development of Australian education; sociological, political, demographic, and economic perspectives of Australian society in change; and changing educational emphases for the 1980s. The third section contains the papers presented at the conference. Topics discussed include social influences on British education, the future of formal education, the educational consequences of youth unemployment, education for a complete life, and the implications of societal change for educational research and curriculum. A list of conference participants is included. The publication concludes with an index. (RM)

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Education, Change and Society

Edited by
Peter Karmel

Chairman, Tertiary Education Commission
President, The Australian Council for Educational Research

The Australian Council for Educational Research
Golden Jubilee Year Invitational Conference
28–29 August 1980

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The interrelationship between change in the education sector and change in the wider society is the focus of this publication. While many of the papers have an Australian orientation, the issues which they raise are relevant to most modern societies experiencing a period of rapid economic, political, and social change. The contributors include some of the most eminent Australian, European, and North American scholars interested in educational affairs, as well as Australians prominent in the fields of industry and trade unionism. An important perspective is also provided by the six State Institutes of Educational Research. The papers were generated by an invitational conference held in 1980 to mark the golden jubilee year of the Australian Council for Educational Research.

The Australian Council for Educational Research is a major independent national research institution. Established in 1980 through a grant from the Carnegie Corporation of New York, the ACER has grown to be Australia's foremost educational research body. Employing some forty researchers, the ACER conducts a wide-ranging research program in the three broad areas of the social context of education, learning and teaching, and measurement and evaluation. In addition, the ACER provides an extensive advisory service for educators and maintains a comprehensive range of library and information services. Professor Peter Karmel, the editor of this volume, is currently the President of the ACER, as well as Chairman of the Tertiary Education Commission.

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PREFACE

The papers in this publication derive from the invitational conference conducted by the Australian Council for Educational Research on 28 and 29 August 1980. The conference, held at the University of Melbourne, was one of the activities planned to mark the fiftieth anniversary of the founding of the Council. The theme of the conference was 'Societal Change and its Impact on Education'.

The 95 conference participants represented a cross-section of the Australian community, including teachers, educationists, employers, trade unionists, and media personnel. The participants came from every Australian State and Territory as well as New Zealand. In addition, four distinguished overseas scholars — Professor A.H. Halsey, University of Oxford, Professor Torsten Husén, University of Stockholm, Dr Henry Levin, Stanford University, and Dr Ernest Boyer, Carnegie Foundation for the Advancement of Teaching — attended and presented major papers.

Purpose of the Conference

The conference was designed to focus attention on the interaction between economic, demographic, political, and social change and the education system. In common with much of the rest of the world, Australia is experiencing a period of rapid change. Technological developments, demographic shifts, modified social relationships, and an uncertain economic future are some of the components of this change. In any period of change, the traditional roles of major social institutions come into question, and education is not immune from such a re-examination.

The process of examining the interaction between education and changes in the wider society can be viewed as comprising four interrelated stages:

a consideration of the traditional role of education in society;
an identification of the types of changes which society is likely to experience;
an examination of the likely 'impact' of social change upon education;
a reconsideration of the form and function of education in the light of change in society.

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If a rigorous analysis of each of these stages could be encouraged by the conference, the task of preparing Australian education for the coming decades would be facilitated. In this analysis, it was important that international experience and perspectives be brought to bear on the issues of concern.

Organization of the Conference

Because of the broad nature of the issues to be examined, it was essential that the areas of debate be identified well in advance of the two days of the conference itself. Background papers relating to the above stages of inquiry were commissioned from four prominent Australian scholars.

Professor Brian Crittenden, Professor of Education at La Trobe University, prepared a paper entitled 'Theoretical Assumptions in the Recent Development of Australian Education'. This paper, which was written from a historical and philosophical perspective, discusses changes in the main objectives and assumptions of education in Australia since about 1950 and assesses critically the ones most relevant to current practice.

Two of the background papers outline and analyse recent changes in Australia and attempt to predict the likely course and rate of change over the next few decades. The first by Professor Don Aitkin, Professor of Political Science at the Australian National University, examines the political and sociological dimensions of change; the second by Professor Sir Bruce Williams, Vice-Chancellor of the University of Sydney, outlines the economic and demographic factors which influence the proportion of the nation's resources which are allocated to the education sector, and considers a number of likely changes in the relative strength of these factors.

The fourth background paper attempts to draw together the issues raised by the other three background papers. Mrs Jean Blackburn, a former full-time member of the Schools Commission, considers the impact of societal change upon the functions of Australian education and discusses some of the modifications of the form and content of education which may be necessary as a result of these changes.

To promote discussion and debate, the four background papers were circulated to conference participants several months before the conference, and six individuals representing a wide range of interests were invited to prepare statements of reaction which were also circulated. The reactants were: Mr R.G. Fry, Director, Metal Trades Industry Association of Australia; Dr D.A. Jecks, Principal, Churchlands College of Advanced Education; Mrs J.E. Kirner, Executive Officer, Victorian Federation of State Schools Parents Clubs; Mr P.W. Matthews, Director of Studies, Trade Union Training Authority; Dr B.W. Scott, Managing Director, W.D. Scott and Company, Sydney; Mr J.R. Steinle, Director-General of Education, South Australia.

As a further stimulus to debate, the State Institutes of Educational Research established working parties to examine issues raised by the background papers and to prepare reaction statements. Their reports were made available to participants at the time of the conference.

Because of the overlap and space limitations, the original reaction statements prepared by the Institutes have not been included in this publication. After the conference, the Institutes were asked to elaborate certain of the issues raised in their reaction papers, and these shorter contributions have been reproduced in this volume.

The pre-conference activities were designed to enable participants to bring with them a set of data on various aspects of change in Australian society and an understanding of the issues involved in considering the implications of change for Australian education. At the conference itself, these issues were placed in an international perspective through the papers presented by the four overseas authors.

The implications of change for two important aspects of educational endeavour — educational research and curriculum design — were the subject of conference papers by Dr John Keeves and Dr Malcolm Skilbeck. The conference concluded with a summation of the issues raised by the pre-conference activities and at the conference itself.

April 1981 Peter Karmel

Acknowledgments

It was necessary to have the willing and generous co-operation of a great many individuals, organizations and institutions in order to carry through the invitational conference, its associated activities, and the publication of this book.

The major part of the planning for the conference was undertaken by a committee from the ACER. Mr Phillip McKenzie of the ACER was the administrative officer of the committee and he undertook the principal administrative duties associated with the conduct of the conference and the production of this volume; his work merits special acknowledgment.

The authors of the background papers, the reaction statements, and the major conference papers deserve appreciation for the conscientious preparation of their papers and their co-operation in meeting the set deadlines.

The State Institutes of Educational Research contributed significantly by generating wide interest in the conference within the educational community. They established working parties to examine and debate the issues raised by the four background papers and the six individual reaction statements. Through a demanding process of seminars, discussion groups and writing, the working parties produced substantial statements which provided worthwhile information for the conference.

The conference itself was conducted with the aid of the excellent facilities of the University of Melbourne, and appreciation is extended to the University and its officers for their willing assistance. Andrew Sturman and Mrs Marjorie Balloch, both of the ACER, provided valuable administrative assistance especially during the two hectic days of the conference. The papers were prepared for publication by the Publishing Division of the ACER.

Finally it is appropriate to record the part played by the Carnegie Corporation. The ACER was established in 1930 with the assistance of a generous grant from the Carnegie Corporation of New York and therefore the Council was particularly gratified for support from the Carnegie Foundation for the Advancement of Teaching, Washington, in the jubilee year of the ACER, which enabled the visit to Australia of Dr Ernest Boyer.

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BACKGROUND PAPERS

I

Theoretical Assumptions in the Recent Development of Australian Education

Brian Crittenden

Characteristics and Criticisms 1945–60

In the period since 1945, the most dramatic change on the Australian educational landscape has been the enormous growth in the institutions of formal education.[1] The scale of the expansion can be clearly indicated from a few statistics. Between 1947 and 1972, the total Australian population increased from 7.5 million to about 13 million, with about 2.5 million of the increase being through immigration. Within this time — specifically the 20 years from 1950 to 1970 — the number of enrolments in both government and non-government schools doubled while the number of teachers more than doubled by a substantial margin. In the government schools, teaching staff increased from about 35 000 to 95 000. (In the decade 1960–70, the number of teacher trainees for government schools rose from 15 460 to 36 370.) One of the most significant developments was the increasing percentage of students staying longer in the secondary school. The percentage of 17-year-olds still at school in 1955 was 12.5 for males and 5 for females; by 1970 these figures had reached 31.7 per cent and 23 per cent. In government schools, the actual number in the final year grew from 6100 to 45 000 over the span of 20 years.

In the face of profound change in beliefs and values as well as in the material features of our society, the system of education has certainly responded to the pressures of physical and economic expansion. But to what extent has the growth of the system been informed by a critical theory about the nature and provision of education, one that is alive to the state of the cultural context? What kind of theory has in fact guided our educational policies and practices during the past 30 years? The short answer given by a number of commentators is that there has been very little guiding theory at all — at least of a systematic, carefully developed kind. Most changes are said to betray an attitude of expediency rather than the application of a consistent theory.

At the beginning of the 1940s, the educational system in Australia exhibited characteristics that had remained relatively constant since before the First World War. The government schools in each State were controlled by a highly centralized, hierarchical form of administration. Students were sifted through an elaborate sequence of public examinations — in 1939 a student completing secondary education in Victoria would have gone through four such examinations. Secondary and tertiary education was assumed to be suitable and necessary for only a minute proportion of the population (in several States, fees were still being charged in government secondary schools in 1939). A uniform and rigid curriculum of subjects in a definite order of prestige prevailed throughout Australia. The process of schooling consisted mainly in the imparting and memorizing of large quantities of content. The key unit in the process was the class group; it was generally assumed that everyone of approximately the same age should proceed at a standard pace.

Through the war of 1939–45, Australia entered a period of rapidly growing economic prosperity. There was a great expansion in secondary industry and a boom in the overseas sale of primary products, especially wool. The economic utility of higher levels of educational attainment was advocated by employers and politicians and readily appreciated by a growing proportion of the population. The war also prompted visions of a better society and it was usually assumed that education would be a key instrument for their advancement.

In this atmosphere of heightened interest in education (or, more precisely, schooling), a number of adjustments were made to the system during the 1940s. In particular, the system of external examinations was modified somewhat in most States; decisions were made to raise the minimum school-leaving age — but they were not implemented immediately except in New South Wales (to 15 years) and in Tasmania (to 16 years); and fees were finally abolished in government secondary schools.

However, the changes that had occurred in the substance and administrative form of Australian education and its underlying theory by as late as 1954 were relatively slight. This is clearly illustrated in the book by R. Freeman Butts (1955), *Assumptions Underlying Australian Education.* R.W.B. Jackson's (1961) comments echo much the same criticisms as one finds in Butts. These authors emphasize the undesirable effects of the highly centralized system, the uniform curriculum pitched at the average and giving little attention to individualized instruction, the degree of specialization in the secondary school, the low status of the social sciences and the arts in the curriculum, the neglect of moral-social values and attitudes and the skills of judgment, the typical 'chalk-and-talk' method accompanied by the dictation of notes to be regurgitated at internal and external examinations. On the subordination of schools to university requirements, Butts concluded: 'Either more should go to the university

or else a different set of assumptions should guide the educational programme for the vast majority'. Jackson was particularly concerned with the rapid physical expansion that had occurred in the 1950s. He stressed the need for a much higher public expenditure on education and for the establishment of clear priorities to guide the growth of the system.

Key Changes since 1960

If Butts and Jackson were writing their reports on the Australian educational system today, they would undoubtedly be somewhat less dissatisfied. Whatever may be said about the nature of the guiding theory, there have been some significant changes in the practice of Australian education over the past 20 years. Before examining directly the state of the theory, it will be useful to make a brief list of the ways in which practice has been changing.

(a) Public expenditure in education has increased vastly since the mid-1950s. In the 1956–57 budget, it formed 2.1 per cent of the GDP, by 1976–77 it had reached 5.8 per cent. The actual amount spent on education each year grew dramatically during the past decade. The total increased from about $1300 million in 1970 to over $5000 million in 1976–77.

(b) The Commonwealth Government has come to play a much more active role in the conduct of education in Australia. The most obvious aspect of its involvement has been in the provision of funds. The percentage of the total expenditure on education contributed by the Commonwealth has risen from 2.6 in 1956–57 to 42.1 in 1976–77. After the Second World War, the Commonwealth Government began its more active role in education through scholarship schemes for secondary and tertiary students and subsidies for universities. Its role at the tertiary level was greatly enlarged following the recommendations of the Murray Report (1957) and the Martin Report (1964). Since 1974, it has taken full responsibility for the funding of universities and colleges. One of the most significant initiatives of the Commonwealth Government in education was the decision in the mid-1950s to give various forms of financial aid to non-government schools.

Through the allocation of funds (and in other ways) the education commissions established by the Commonwealth Government now exercise a pervasive influence on educational policies and practices at all levels of the system in Australia. The Schools Commission (for primary and secondary education) was established in December 1973. It has not only been concerned with specific priorities for funding, but has played a significant role in exploring a theoretical framework for national policies in education. The super-centralization of control is probably more advanced in the case of the universities. Given the present circumstances of severe financial constraint and the more active role of the government since 1975 in setting guidelines for the commissions, the systemic aspect

of universities rather than their character as individual institutions is likely to become more prominent.

(c) While power over the educational system has been growing at the commonwealth level, the state education departments have made some notable efforts to decentralize their systems. The beginnings of a regional pattern of administration have been established; inspectors have largely relinquished their role as evaluators of schools and teachers and now concentrate on being advisers; the system of public examinations has been substantially dismantled; schools are now expected to take responsibility for the details of the curriculum they offer; local community participation in education is being actively encouraged. In claiming that the central state departments have slackened their hold on the school system, I do not wish to imply that anything like a satisfactory pattern of decentralized authority in education has yet emerged. The central departments still possess enormous power (for example, in the provision of funds and in the appointment of teachers).

(d) By the middle of the 1960s, a minimum school-leaving age of at least 15 years had been adopted in all States.

(e) Although Freeman Butts was pessimistic about the development of comprehensive secondary schools, within six years of his visit they had become the typical form in the government school system of three States (New South Wales, Tasmania, and Western Australia). In the 1960s, the pattern was extended throughout Australia. 'Comprehensiveness' has meant that the same school is provided for all the adolescents (boys and girls) living in the same area. The curriculum has often not been comprehensive in the usual sense. In the early stages particularly, what it involved was the provision of separate programs for different sub-groups of students attending school at the same place. The comprehensive theory has also been qualified by the continued existence of some selected high schools and some of single sex (and, in Victoria, by the division of secondary education into technical and high schools).

(f) During the past 10 to 15 years, there has been a ferment of change (relatively) in the curricula of Australian schools, particularly at the secondary level (Barcan, 1979). The direction taken is one that Butts would applaud. The curriculum as a whole has generally become more expansive and less structured. Electives make up a considerably larger proportion of the course. The prestige rating (or at least popularity) of subjects has been affected significantly. For example, foreign languages, English literature, physics, and chemistry have dropped on the scale while social studies, in a large variety of guises, and biology (thought to be more 'humanistic' than the physical sciences) have risen. In the reconstruction of curricula, special emphasis has been placed on integrated studies of various kinds (relevance to students' interests being one of the major supporting claims) and on the acquisition of skills of inquiry or methods of thought rather than on the learning of content.

A national Curriculum Development Centre (CDC) was established in 1975. Its main tasks are to initiate and support curriculum projects and research, and to provide assistance to state systems and individual schools in the design, adoption, and evaluation of curriculum materials. The CDC took responsibility for the further development of the Australian Science Education Project (ASEP) which had been set up in 1969 by the federal Minister for Education and Science and the six state Ministers of Education. It was the first major national effort at curriculum development in Australia. At the end of 1976, the CDC completed the supervision of a comparable project in social education: the Social Education Materials Project (SEMP). Both ASEP and SEMP offer a wide variety of materials and procedures and draw on a range of disciplines. They are sufficiently flexible to be adapted to quite different styles of curricula.

(g) Finally there have been important changes in the pattern of tertiary education. In 1965, a distinct institutional form was introduced as an alternative to university. Many individual colleges and institutes of this kind existed before 1965. However, under the funding and policy role of the Commonwealth Government begun in that year, the colleges of advanced education have expanded substantially in numbers and in the range of diploma and degree courses they offer. (In 1978 there were 112 000 equivalent full-time students enrolled in 70 colleges.) Technical and further education (TAFE) has also been much more firmly established in the structure of funding and policy making at the level of Commonwealth Government. It is estimated that in 1977 there were 204 000 equivalent full-time students enrolled in 194 major institutions and 285 others throughout Australia. Since 1974–75, TAFE has been receiving an increasing share of the commonwealth funds allotted to post-secondary education. The recurrent grant for TAFE rose from 3.5 per cent of the total in 1974–75 to 4.9 per cent in 1979–80; the capital grant has increased from 10.1 per cent to 42.8 per cent.

General Theory of Education for the Secondary School

The hectic pace of expansion that characterized Australian education for 20 years finally began to slacken from about 1977. This change reflected the impact of the serious inflation and unemployment that started to develop at the beginning of the decade, as well as the first effects of the declining birth rate. We are now faced with some new theoretical as well as practical issues. However, most of the theoretical positions that influenced the development of the past two decades were responding to questions that are also fundamental to the debate on future educational policy.

In commenting on the kind of theory that has guided the recent changes in the practice of Australian education, I shall refer mainly to the reports of the Schools Commission (and that of the Interim Committee) and to two reports by government committees on secondary education. In

order to keep within manageable limits, I shall restrict my comments, in this section, to the theory that has supported the development of secondary education and, in the following, to changes in curriculum (particularly at the secondary level). One justification for emphasizing the secondary school is that, because of the changes of recent decades, this stage more than any other in the whole system of formal education has been beset by complex questions about the proper nature of its educational work and the purposes it should serve as a social institution. In the final section of this paper, I shall bring together a number of general issues to which I believe we need to give much more careful attention if we are to make progress towards a more coherent and adequate theory of education. The reports of the Schools Commission will form the focus of that discussion.

The Wyndham Report (1957)

The report of the Committee Appointed to Survey Secondary Education in New South Wales (under the chairmanship of Dr H.S. Wyndham) was published in 1957. After a period of hesitation, it was adopted as the blueprint which has shaped the work of the secondary schools in that State during the past two decades. Although the report is largely concerned with recommending changes in the institutional form of the secondary school and the design of its curriculum, it does make a serious attempt to provide at least an outline of the principles on which its proposals are based. Although the discussion tends to have the character of a résumé, the report contains something like the embryo of a systematic theory.

It diagnoses the main problem of secondary education in the following way. During the past century, this level of education was the preserve of a social elite. It was redirected in the early part of the present century to the development of an elite based on academic talent. Following the First World War, the secondary school population broadened well beyond such an elite. However, very little was done to revise the basic purposes of secondary schooling or the academic curriculum. In the rapid expansion that occurred after the Second World War, the diversity of interests and ability in the secondary school population became much greater — particularly beyond the age of compulsory school attendance. Even in the absence of any positive theory about the broader role of the secondary school, it had become evident that an academic curriculum intended to prepare students for the university was quite unsuitable for the non-academic majority who now made up the secondary school. Given the assumption that secondary education should be provided for all adolescents in the society, the crucial problem, as the Wyndham report (1958:63) saw it, was to devise a pattern of schooling that would meet

'the needs of all adolescents without impairment to the potentiality of any'. The practical solution offered by the report was to treat the first four years as serving the educational needs of adolescents generally, to provide subjects of different levels of difficulty and to include an ample range of electives. The final two years were to be designed for the more able students and to form a suitable preparation for entrance to university.

In developing its theory, the report does not argue from a particular interpretation of the nature of secondary education to the conclusion that it is necessary or at least desirable for all adolescents. It works from the fact that many adolescents are staying longer in the school and simply endorses the assumption that all adolescents should engage in secondary education — whatever its precise character might be. In other words, the condition that the secondary school must cater for all adolescents determines, in part at least, what is to be done in the name of secondary education. Without arguing the issue, the Wyndham report seems to have concluded that four years of full-time secondary schooling — to the age of 16 years — is necessary for everyone. Although the program in the fifth and sixth years is to be regarded as 'an integral part of secondary education' and to be suitable for all 'the most able' adolescents who wish to continue regardless of their interest in tertiary education, it is clearly not treated as a necessity for all adolescents.

The report bases its interpretation of the nature of secondary education on three general 'postulates': (1) that there are important differences in interests and aptitudes between and within individuals and that these vary in the course of time; (2) that education is not simply a preparation for life but an engagement in living here and now (a principle on which Dewey laid particular stress); and (3) that individuals realize their personal growth as members of a society. In coming directly to the issue of what secondary education should be about, the report, in effect, raises two questions (although it treats them together): What are the main constituents of a worthwhile human life as recognized by the members of our society? and How can the secondary school contribute to their development? These questions clearly offer a systematic framework for approaching the task. On the first question, it would be necessary in a comprehensive discussion to face the problems of relativism and the actual differences in our society over what makes a life worthwhile. It is understandable that the report does not venture onto this difficult ground. It merely notes in a cryptic way that while the question is not answered simply by endorsing 'the lowest accepted level of contemporary practice', any features of a worthwhile life to which the process of education is to be directed must be accepted as ideals by a significant proportion of the society. The report in fact offers a list of eight features that it believes are of this kind: health, mental skills and knowledge, the capacity for critical thought, readiness for group membership, the arts of communication, vocation, leisure, spiritual values.

This list is defensible enough — although other items (such as political freedom, social equality, friendship, enjoyment of the arts) could just as well be included. The main point, however, is that one cannot derive from this or any other list of worthwhile-making features of human life what the distinguishing characteristics of an educational process are or what tasks the schools should perform. Such a list is a way of determining the kind of desirable outcomes the educational process should contribute to, but it says nothing about the distinctive nature of the contribution. It is obvious that the Wyndham Committee takes it for granted that the primary task of schools as agents of education is to be understood as an orderly induction into a broad selection of the systematic knowledge in our culture, training in a range of relatively complex intellectual skills, and the development of moral character. This interpretation, or something like it, seems in fact to have influenced the choice of the worthwhile objectives proposed by the Committee. In any case, the role of the school interpreted in this way is immediately related to some of the objectives stated (these might be grouped together under the heading 'living as an educated person') and it determines what the school should do towards realizing the others. In relation to the latter, what the report suggests about the school's distinctive contribution to the objective of health is quite uncontroversial — most people will not confuse education with medical treatment. But the case is less clearcut for the objective referred to as vocation, for here the report declares its belief that the proper task of the secondary school is to provide all adolescents with a sound general education, and vocational or even 'specific pre-vocational' training has no place there. A persuasive argument can be developed for intepreting the role of the secondary school in this way (e.g. Broudy, Smith, and Burnett, 1964; Lawton, 1973). However, the argument as presented by the Wyndham report is far from complete. In particular, the report would need to have made its position much clearer on the nature of general education and on the philosophical, psychological, and social reasons for its belief that a full-time program of such education over a certain number of years was highly desirable, if not necessary, for all adolescents in our society.

The report advocates the form of comprehensive secondary school in which there is a broad range of subjects without any grouping of subjects or students into distinctive kinds of courses. All subjects form part of a single program of general education and the grouping of students varies from one subject to another according to the level of difficulty at which they can work. The report does not, however, offer much detailed argument in support of such a system of comprehensive schools. Its main points seem to be that most adolescents in the early years of the secondary school need to work out an appropriate program gradually. Thus comprehensive schools, particularly when they do not organize the curriculum into separate programs, offer the most satisfactory arrangement.

It is surprising that no appeal is made to arguments based on social equality and integration. (This aspect may have been played down because the Committee included representatives of non-government schools and hoped to produce an acceptable blueprint for all secondary schools.)

Perhaps the main clue to the report's way of interpreting and justifying general education for all adolescents is in its reference to the subjects it proposes as the common core of the curriculum. This core consists of

> certain fields of thought and experience of which no adolescent should be ignorant as a person or as a citizen, irrespective of his level of ability and of the situation in life in which he may later find himself. (Wyndham, 1958:82)

On the basis of this criterion, the report suggests the following subjects: English, social studies, science, mathematics, music, art, craft, physical and health education, religious education. The report wishes all electives (which are to be given an increasing proportion of time through the first four years) to be treated as part of the general education curriculum. But given the criterion for the core subjects of the curriculum, it does not show why or in what way electives outside these subjects are to be treated as part of general education. On the basis of the report's argument, there seems to be no reason why the secondary school should not provide a combination of general education and various specialized programs (including vocational training) or why the core of general education might not be taken on a part-time basis.

In a compressed fashion, the Wyndham report made a serious attempt to present the theoretical foundations of its scheme for the reorganization of secondary schooling. Whether such a document should be expected to do more or not, what I am suggesting here is that there are serious gaps in the argument and a number of key assumptions that need to be justified.

Review by Committee on Secondary Education in Tasmania (1977)

One of the most recent discussions of the theory of secondary education by a government-appointed committee is contained in a report entitled *Secondary Education in Tasmania* published in 1977. The committee was convened by the Director-General of Education to comment mainly on future directions that should be taken in the educational program and the organization of the schools, with particular attention to the first four years of secondary schooling. Most of the 14 committee members were teachers or principals in the school system and all were engaged professionally in the field of education. As well as receiving individual and group submissions, the committee engaged three consultants from other States. It received financial assistance and advice from the Curriculum Development Centre, Canberra.

The approach of this committee to the working out of its general theoretical position is somewhat similar to that of *Education in South Australia* (1970). It begins with an examination of significant changes in contemporary society and suggests some consequences for the practice of education. It adds a section on the psychological characteristics of adolescents and again draws some conclusions for education. Then it turns to a consideration of the purposes of secondary education. Here it employs a distinction between purposes derived from changes in political thought and those that reflect changes in educational thought. The committee's use of this distinction was adopted by the Williams report (1979, Vol. 1:102).

In introducting its discussion of the changing features of western democratic society, the Tasmanian report links the role of the secondary school with the very broad objectives of securing a society in which social justice prevails. It emphasizes, however, that the school can only play a limited part towards this end; that the removal of unjust inequalities depends on fundamental changes in social and economic structures. The report also declares its preference for a decentralized organization of society in which individuals develop in relatively small groups where it is possible to relate personally with other participants.

On the basis of its analysis of the social setting, the report draws three very vaguely stated consequences for education. First, the school must respond in an appropriate way to the effect of growing unemployment on young people. Second, the school program should be so flexibly designed that choices affecting later chances in life can be postponed as long as possible. (The report does not consider how the failure to make certain definite choices fairly early in one's education may inhibit the range of later choices.) Third, education will become increasingly important for leisure and as the basis on which status in the society is determined. It will need to be made available in more diverse forms for adults as well as the young. (Here, the report draws heavily on Torsten Husén's *The Learning Society*.) Apart from the vagueness of these conclusions, they assume that the nature of education (and, specifically, secondary education) is already understood. Clearly the report does not wish to suggest that the nature of education or the role of the school should be determined by an appeal to changing social needs.

Although the discussion of adolescence is fairly superficial (the report itself urges that its comments should not be taken as 'the last word'), an understanding of the main characteristics of growth during this period is certainly crucial for an adequate general theory of secondary education. What the report does not make clear is the level at which this understanding contributes to the construction of such a theory. (Does it help us shape the nature and aims of secondary education or is it relevant only to the determination of the most effective means?) Although the characteristics of adolescent development may be mainly relevant to questions

about the means of secondary education, they also contribute to the criteria for the selection of content and specify some proximate aims or purposes to which the process of education should be directed. However, as with the needs of society, there is no simple logical track from a statement about the needs of adolescents to a conclusion about what the nature of their education should be.

The report finally comes to the point at which it should have started. As with the earlier report on which I have commented, this one also assumes that a declaration of the purposes of education (the process, the school institution) necessarily reveals the nature of education. In order to speak to the latter issue in terms of purposes, it is necessary to specify what are believed to be the distinctively educational outcomes that processes claiming to be educative must be trying to achieve. The educational outcomes themselves may serve many different purposes that people have — or if the educational outcomes are of sufficient significance in the scale of human values, people may justifiably engage in them with no ulterior purpose at all. Some purposes are necessarily related to educational outcomes, others are related in a purely contingent way (and might be realized by quite different means). Suppose, for example, that one of the distinctively educational outcomes to which the process of secondary schooling is directed is an understanding of scientific concepts, theories, and methods of inquiry and the place of science in contemporary culture. If we then ask what purposes this understanding of science serves, the answer may be that it has no purpose in any strict sense but is a significant part of living as an independent, reflective, critically aware human being. However, it may serve many necessarily related purposes (for example, as a basis for working in medical research) and many that are only contingently related (for example, as a means of gaining high social status or level of income).

While the Tasmanian report does not adequately identify the kinds of purpose that education may be claimed to serve, it quite correctly distinguishes between purposes that reflect political motives and reasons and those that are based on distinctively educational considerations. However, in the application of this distinction, I believe the report makes some serious mistakes.

(a) The desire to use the school to bring about social change has often been based on non-educational reasons other than purely political ones (unless one interprets 'political' very broadly).

(b) It may be true that various recent changes in the purposes that schools are intended to serve have been made for political and other non-educational reasons. Among the examples given by the report are the raising of the school-leaving age, the introduction of comprehensive secondary schools, the Commonwealth Government's policy for funding schools on a 'needs' basis (in relation to the purpose of promoting social and economic equality or at least equality of opportunity through school-

ing). Without attempting to analyse any of these issues in detail, the point I wish to emphasize is that there are distinctively educational reasons for (and against) at least some of these sorts of change. Given the fundamental and complex connections that the practice of education has with most other aspects of human life, it is not surprising that many proposed changes can be argued on a variety of grounds (for example, political, economic, moral) as well as the specifically educational. Some purposes are purely or predominantly of a non-educational kind and may, in fact, undermine educational values (as when the schools inculcate a theory of racial superiority in support of the ruling group, or when an egalitarian ideology requires the schools to attempt to eliminate all individual differences in educational outcomes).

(c) The most serious mistake in the report's account of purposes and education is its claim that political reasons determine the outcomes that the schools should be trying to realize while educational thought is concerned exclusively with the means of achieving these outcomes. I hope that the conceptual confusion of this division of labour is clear from what I said about education and purposes. The report is not even consistent with its own distinction in that it talks of *purposes* based on educational thought and includes outcomes as well as processes in its list. Educational theorists are vitally concerned with educational outcomes as well as with processes. It is not even possible to work intelligently on the latter unless one has some criteria of what counts as an educational outcome. Such outcomes may or may not effectively serve various purposes set by politicians, economists, social reformers, and others. One of the most pressing tasks for educational theorists is to resist vehemently the very distinction that the report (and the Williams Committee following it) proposes. They need to be constantly vigilant to defend educational values from being distorted when the institutions of education are used to secure other values and interests — particularly of a political kind.

The lines of argument from the section on purposes to the discussion of the educational program are not very closely drawn in the report. However, some elements are obvious enough — such as postponing specialized courses as long as possible in order to keep open the opportunities of choice. Among the main ingredients in the report's interpretation of the curriculum in the secondary school (which, in practice, it regards as Years 7 to 10), I would draw particular attention to the following:

(a) The report endorses the view that the primary role of the school is the development of intellectual skills. It insists, however, that although these skills cannot be learnt apart from some content, their acquisition does not require the study of academic subjects. These fundamental beliefs about the nature of education and the role of the school are not examined and defended in any systematic way. Such a discussion would have been preferable to much of what was done in the earlier section on purposes.

(b) Like the earlier report, this one is firmly convinced that the secondary school should be comprehensive in style. It should not engage in vocational training but should concentrate on providing everyone with general education; preparation for work should be of a broad kind, done within the context of general education. The report appeals to Broudy et al. (1964:10) in order to indicate what it means by 'general':

> That which is taught should consist of the central skills, ideas, and evaluations which can be most significantly and widely used in order to deal with life in our times. This notion is in contrast to that which holds general education to be a survey of generally everything.

The report does not argue in any detail (as Broudy and his co-authors do) on why such a general education is highly desirable, if not necessary, for everyone — and for everyone during adolescence. It briefly offers three broad reasons: (i) such an education enables people to live in a more fulfilling way in all the main aspects of their life; (ii) it 'offers a much better preparation for a future working life than an education which takes a narrow view of vocational competence'; (iii) a program of general education for everyone is more likely to serve the objectives of equal opportunity than several different kinds of courses.

(c) On the question of the relative responsibility of the central education department and each school, the report proposes that broad curriculum goals and policies and the framework of the core curriculum in general education should be centrally prescribed while the specific ways of achieving these goals and implementing the core curriculum should be left to individual schools.

On the basis of these (and other) considerations, the report proposes a common curriculum of 'activities and experiences'. These may be approached through subjects, interdisciplinary studies, or the examination of large-scale topics. Six areas are included: language, mathematics, the investigation of the physical environment, the investigation of the social and cultural environment, the arts (art, music, drama) and crafts; problems of concern to adolescents. Each area is studied for its contribution to knowledge content, skills, and values. Physical education is an additional element in the common curriculum. The report intends that this full common framework should apply to everyone in the first two years, while in the later years students should choose to develop particular aspects within the framework or add areas from outside (for example, vocational skills). In general, the report favours mixed-ability grouping for all years, but particularly the first two. It comments in general terms on the needs of very able and slow learners and supports some special groupings for particular curriculum units.

For a document of modest size, *Secondary Education in Tasmania* manages to comment on an enormously wide range of topics relating to the educational program and organization of secondary schools. As its quotations and footnotes indicate, it has drawn broadly on work by educational

theorists in various countries, on important recent reports, and on a variety of investigations and experiments conducted in Australia and elsewhere. In its broad curriculum proposals and on numerous details, I believe it makes sound comments and proposals. In so far as it tries to set out a general context of educational theory, I have tried to point out what I believe are some serious weaknesses. I have hardly said anything on what the report has failed to include in the development of its theory. In this respect, probably the most important is the lack of any discussion of how individual development is related to gaining an understanding of the main forms of knowledge and other symbolic modes of culture, and of the range and distinctive characteristics of these symbolic modes. As the report quotes from Broudy and his co-authors on several occasions, it might have referred to their treatment of the above issues and how they relate it to the justification of a common curriculum of general education. Finally, I am doubtful whether the report makes a persuasive case for why 15- or 16-year-olds who have little ability or interest in any kind of serious intellectual activitity should be compelled to stay on at school for what would have to be a very diluted form of general education.

There has been a more recent report on education in Tasmania. A substantial part of this report, *Tasmanian Education: Next Decade* (TEND, 1978), refers to secondary education, although its scope includes the whole system. I shall not attempt to comment on the TEND Report generally, but shall note two points that relate particularly to issues in *Secondary Education in Tasmania.*

(a) The TEND report also believes that the proper task of the secondary school is to provide general education, and it also favours identifying a core curriculum of general education that all students should follow. General education is interpreted as 'the content and processes it is desirable for all persons in a particular culture to try to learn' (TEND, 1978:16). The core curriculum is 'the central part of a general education . . . the ideas, skills, and values that should be experienced and learnt by all persons living in our culture' (TEND, 1978:16–71). The report proposes three broad areas of learning for the core curriculum in both primary and secondary schools: to communicate efficiently, to think effectively, and to develop humane standards of value. These are clearly fundamental tasks of general education. To satisfy them adequately, however, it is probably necessary to take in the whole range of the general education curriculum.

(b) The TEND report gives special attention to the educational needs of the age groups 16-20. It takes for granted that the appropriate length of secondary schooling for everyone is six years. However, what the report finally proposes is not simply an extension of the general education curriculum over six years. Instead it argues for the establishment of multipurpose community colleges that would replace the existing secondary and technical colleges and also include various forms of further

education. The curriculum would be made up of a general education program, full-time pre-service vocational courses (to replace present apprenticeship and other part-time arrangements), and a range of courses for leisure and community development. The suggested association may prove to be a very suitable one — although in practice it would surely be extremely difficult to combine such diverse interests and objectives within a single institution. The problems of this kind in a typical university would be minor in comparison. However, in relation to secondary education, it is not clear what the rationale is for the two extra years embedded in this composite. Its design is not related to the preparation of adolescents (or others) who wish to proceed to tertiary education. Obviously not all older adolescents at the community colleges would be following the full general education program. The proposed community colleges seem to belong to the species 'post-secondary, non-tertiary'.

The changes, actual and proposed, to the later years of Tasmanian secondary schools over the past two decades are an interesting symptom of the problems of identity that have troubled secondary education. At the beginning of this period, matriculation colleges for the fifth and sixth years were set up and were directed mainly to university entrance. The retention rate at this level expanded over the next ten years or so (from 9 per cent in 1965 to 24 per cent in 1977), but only about one-third of those who entered were interested in tertiary education. So the institutions were renamed secondary colleges and adopted a somewhat broader curriculum. Now the TEND report wants to replace them altogether by a super-comprehensive community college. Ironically it seems that the only significant interests that may not be adequately accommodated by this arrangement are those of the minority who wish to engage in advanced, systematic academic work as a background for university studies.

Despite their differences over details, these and similar recent reports agree fundamentally in their emphasis on general education as the appropriate schooling for all adolescents. Although the most recent reports give close attention to unemployment and the relationship between the school and the work place, the emphasis on general education remains substantially the same. A similar position is maintained by the Schools Commission in its 1979 report, in which the school and unemployment form the main theme in the discussion of policy issues. The position of the reports suggests a number of questions that need further consideration: (a) How is the relationship between general education in the secondary school and the public disciplined forms of knowledge (or, more generally, the intellectual culture) to be intepreted? (b) If it is envisaged as a serious introduction to the intellectual culture, should not the secondary school (at least after the first year) offer a sequential structured program of learning? (c) At least, should there not be adequate provision made for anyone who wishes to follow such a pro-

gram? (d) Within a curriculum of general education, should there not be adequate opportunity for very able students to take subjects at an advanced level? (e) What appropriate alternatives, either in schooling or in other activities, can be devised for those who after 13 or 14 years of age have no interest in even a watered-down form of general education? (f) What justification is there for more than four years of continuous secondary schooling in general education (particularly of the largely unstructured kind)? On the last question, perhaps we should detach the fifth and sixth years from the secondary school altogether and associate them directly with the tertiary level.

Curriculum Theory

I have already referred to aspects of curriculum theory in the context of more general theories about secondary education. I wish now to examine more directly some of the main assumptions, objectives, and theories that have influenced the curriculum changes of the past ten years or so. As I mentioned earlier, towards the end of the 1960s schools in several States suddenly found themselves charged by the central education departments with the responsibility for designing the details of their curriculum (Jones, 1970:5-6; Reed, 1968:9-10). The possibility for individual school initiative has been enlarged over the past decade by the further curtailment of public examinations at the secondary level. To appreciate the kind of curriculum theory that has been at work during this time, I shall refer to its treatment in the reports of the Schools Commission (and that of the Interim Committee). One of the major policies advocated throughout these reports has been the devolution of responsibility from the central state education authority to the individual schools. The Commission has recognized the need for a middle ground between the old system of central control and complete freedom for each school to do what it wishes. On curriculum specifically, it has repeatedly emphasized the existence of a certain range of common learning for which all schools in some fashion should provide. The initiative that individual schools can now exercise in curriculum is one of the reasons for the present interest in the possibility of a core curriculum for all Australian schools. I shall comment, in the final part of this section, on interpretations and arguments that have been advanced for such a curriculum (especially in a recent report prepared by the Curriculum Development Centre).

Some General Features of Curriculum Theory since 1960

Not all significant changes in recent curriculum theory and practice are related to the transfer of decision making to individual schools. Although this change has given prominence to certain issues, there have been developments in curriculum theory that have had consequences for practice whether the decisions are made centrally or locally. During the past

20 years, in the United States and Britain, the curriculum has become the focus for much of the multidisciplinary work that constitutes educational studies.[2] Among the major themes over this time, I would draw particular attention to the following: (a) the attempt to distinguish key structural features of each discipline (concepts, principles, methods of inquiry and verification, etc.) that would facilitate understanding and the transfer of learning to new situations, and be an effective framework for coping with the rapid expansion of new details of knowledge; (b) a renewed emphasis on learning through discovery, often associated with the belief that learning the methods of inquiry is more important than the content and can be achieved without reference to any particular content; (c) the various efforts to reduce the multiplicity of disciplines to a few logically distinct forms of knowledge, each of which gives access to a significant aspect of human experience; (d) concern for the design of total curricula that contribute to the broad human development of all members of the society (theories about the forms of knowledge have had a strong influence on the blueprints proposed); (e) the arguments by a number of sociologists of knowledge that the selection and organization of the content of a curriculum reflect the interests of the dominant social group — that the curriculum is an instrument for maintaining social control; (f) various forms of integrated studies (among the reasons for this interest: to avoid a fragmented over-specialized approach to knowledge, to present disciplines in a more relevant way to non-academic students, to study complex social and other problems more effectively); (g) the continuing efforts by theorists in the tradition of progressive education to defend the idea of curriculum as determined mainly by that learning in which children and adolescents freely engage in pursuing their felt needs and interests.

In addition to such themes in the work of those professionally engaged in the study of curriculum, there was a great outpouring of more popular writing (often by teachers) in the 1960s and early 1970s that was severely critical of what was being done in the name of education by the American public schools.[3] This work reflects many different, and even conflicting, perspectives. However, most of the authors would agree with Goodman's (1964) claims about the suffocating effect of compulsory schooling on many adolescents, and the 'socializing to the national norms and regimenting to the national "needs" ' produced through the bureaucratic structure of the system of schooling and the repressive mechanical style of pedagogical practices. The prescriptions for a better alternative are diverse: the dismantling of the school altogether, the setting up of small 'free' schools whose organization does not go beyond the level of a local community, reforming the quality of human relationships within the present system, and so on. In relation to curriculum, while some of these writers stress a certain kind of political awareness and action in identifying a desirable form of education, most have concentrated on characteristics of the process itself: the learner's freedom of choice, the non-directive role

of the teacher, the primacy of warm happy human relations. Some radical writers have been strongly critical of the soft so-called non-directive pedagogy (Kozol, 1972). Given local variations of emphasis, the recent development of curriculum theory and practice in Australia has been shaped to a large extent by educational thought and experience in other countries — particularly the United States and Britain. The influence of most, if not all, of the themes that I have briefly sketched can be clearly seen. Even the deschooling argument has had some effect, although as yet there has been no serious inclination to accept its consequences.

Curriculum Theory and the Reports of the Schools Commission[4]

In the report of the Interim Committee (1973) and the first two reports of the Schools Commission (1975; 1976), there are several comments on the broad nature of the educational work of the school. These clearly endorse the beliefs that educational programs for at least most of the primary and secondary years of schooling should be general in the sense of including a wide range of significant activities, and that the central emphasis should be on the development of intellectual competencies (skills and knowledge). The Report of the Interim Committee (1973:2.21) briefly sets out the 'special functions' of the school as being: the acquisition of skills and knowledge, an initiation into the cultural heritage, the valuing of rationality, the broadening of the opportunities to respond to and participate in artistic work. The first report of the Schools Commission (1975:1.5) interprets this aspect of the Interim Report's position as being 'preservation of the intellectual functions of schools whilst attempting to carry them out more effectively and to extend the functions of schools in response to social changes'. In the context of discussing equality of opportunity, the 1976 report (SC, 1976:2.2) refers to the broad kinds of outcome the school should be trying to achieve: 'critically to confront experience, to make sense of the world and confidently and rationally to act upon it'. The development of 'generalized intellectual competencies' involved in these outcomes is 'the special business' of the school. The report even gives a hint of what it thinks the sweep of the curriculum over the primary and secondary stages should be like: basic learning skills acquired by everyone by the end of the primary school, a common secondary education concerned with 'broad intellectual and social skills', with more variety added in the later years. The Commission has also commented in various contexts on issues relating to a common curriculum. I shall refer to its position in the next section.

Although Section 13 of the Act establishing the Commission refers to the development of the curriculum, I think it can be fairly claimed that the Commission's reports are most notable in this area for their lack of systematic discussion and argument. In its report of April 1978, the Schools Commission (1978:1.25) stresses that no one concerned with

schools, including itself, 'can stand aside and allow uncertainty and ambiguity about authority, goals and processes to continue'. The following year, the Schools Commission (1979:1.8) in commenting on the relation between school and work acknowledges that 'there is a very real problem of structure at the secondary level which has not yet been thought through'. But these states of affairs existed in our schools well before the Commission came into existence. A study reported in the *Quarterly Review of Australian Education* refers to 'a pervasive sense of confusion and uncertainty about aims and purposes' among primary school teachers (Warry and Fitzgerald, 1969). In a discussion of the conditions of secondary schooling, Fitzgerald (1970:168) concludes: 'The secondary school has yet to establish its identity as a stage of education in its own right.' We may reasonably wonder why the Schools Commission has been so slow in coming to a recognition of these problems that so crucially affect the educational program of the schools.

In the 1978 report, the Schools Commission (1978:9.28) seems to support a 'developmental model' of curriculum evaluation, one which

> begins from looking at what is being done, not from debate about aims. Such debates are inevitably conducted at such a high level of generality as to have little significance for practice. What is being done, not the rhetoric, is what is significant.

The recent emphasis on the processes of schooling rather than the objectives in curriculum design and evaluation certainly highlights important factors that are overlooked in the model of technical rationality characteristic of the objectives approach. However, a preoccupation with processes has deficiencies of its own. Both processes and objectives need to be examined in any satisfactory approach to curriculum. How can we even see or describe what is being done in school without some assumptions about what count as educational outcomes? Certainly we cannot assess the educational value of what is being done without reference to such criteria. Talk about educational outcomes (that is, what processes of education are aiming at) can be impossibly general or mere rhetoric. But this need not be the case.

As a general concluding comment on the treatment of curriculum theory by the Schools Commission, I believe it has tended to adopt too much of a follower role, reacting to various developments as they occur rather than taking an initiative. The work of the Commission as a whole has been assessed by D'Cruz and Sheehan (1978).

A Core Curriculum for Australian Schools

The various reports of the Schools Commission have referred in general terms to the idea of a common curriculum and have given it support. I have discussed the views elsewhere (D'Cruz and Sheehan, 1978:235–9). In the most recent reports, there seems to have been a shift

of emphasis from an inclusive common curriculum to one that identifies a common core of necessary or highly desirable learning. In the 1978 report, while the Schools Commission (1978:1.4) defends the need for diversity in educational programs, it acknowledges 'that there is a common core of expectations about the skills, knowledge and understanding which children and young people should gain from schooling'.

The present interest in a common core curriculum has been stimulated by two quite different developments: the sharp increase in the level of unemployment and the devolution of curriculum decision making to individual schools. The kind of core curriculum proposed in response to the first of these is preoccupied with identifying the basic skills, knowledge, and attitudes that the conditions of work in our society are thought to require of everyone. It is often assumed that the deficiencies in this basic education account for much of the unemployment among school leavers. An extension of this way of interpreting the core curriculum includes other significant aspects of adult life in estimating the range and level of the core of necessary learning.

A core curriculum of the same kind may be prompted by the second development mentioned above; that is, its main objective is to ensure that school-based curricula do not neglect the minimum necessary skills required by the workforce or society more generally. However, it is more likely that the interpretation of the core curriculum in this context is related to the major elements of an adequate general education or to the common ground of beliefs, values, and skills on which the cohesion of the society as a whole depends.

The Schools Commission has shown interest in both kinds of core curricula. Its emphasis on a minimum level of achievement that everyone should reach in basic skills and knowledge has clear affinity with the first type. However, in general, it seems to favour a more ambitious range of common learning. The Schools Commission (1978:9.9) has drawn attention to the project being undertaken by the CDC on core curriculum and values education. Hence it will be useful to refer briefly to the interpretation and arguments in the recently published statement *Core Curriculum for Australian Schools* (CDC, 1980).

This document defines a core curriculum as 'that set of basic and essential learnings and experiences which can reasonably be expected of all students who pass through our schools' (CDC, 1980:4). The somewhat curious 'basic and essential' is intended to suggest that the core is not limited to the skills of literacy and numeracy but embraces the range of skills and knowledge that everyone needs in order to participate effectively in the life of our society. It should be noticed that the idea of a core in the CDC document is not that of a structural element in a whole curriculum (whether of one school or many) but a description of the learning experiences that should be a common part of everyone's education. While reference is made to the provision of electives, there is no

suggestion on how these might be integrally related to the proposed core.

For a document that believes in the importance of a common core of learning in all Australian schools, its proposals on what the core should include and on the machinery of decision making are remarkably permissive. It is difficult to see how they provide an effective development of the issues of a core curriculum to which the Schools Commission has referred. In its interpretation of the core curriculum, the CDC statement includes a very broad range of items in order to avoid arbitrariness and controversy in trying to select what is most important, and it proposes the form of general guidelines in order to accommodate the diversity among schools. Both these features may overcome difficulties facing a common core curriculum. However, they may also be undermining the project itself. If the scope is too broad, the proposal is more like an inclusive common curriculum than a core. The criteria of what is essential learning become attenuated. If a national core curriculum is designed as a set of general guidelines that are to be interpreted and adapted in the light of all kinds of local variations, it is not clear that the schools would in fact be following a common core curriculum.

What we still need to examine closely are the prior questions about the nature, purposes, and justification of the common core curriculum — and of a common general curriculum. If a common core curriculum is to be determined by what everyone in our society needs to learn in order to live in a minimally satisfactory way, its scope is bound to be very meagre. This will be so even when it is recognized that basic skills cannot be adequately learnt apart from an appropriate content of knowledge. However, it would perhaps be a useful guide for schools if some systematic estimate of this range of knowledge and skills were set out in detail with a clear indication of the minimally satisfactory levels that everyone should have reached by the end of the primary school and by the end of the compulsory period of schooling. Schools should have access to expert help in diagnosing and remedying problems of students who fail to reach these levels. However, it would have a distorting effect on the educational role of the school if the range of basic knowledge and skills became the object of a national or state testing program or were treated as a distinct part of the curriculum. If we broaden the approach to the question of a common core curriculum by asking what aspects of education are desirable for everyone in our society (or what education everyone needs for the substantial development of human capabilities), the answer can hardly avoid containing at least the outline of a complete curriculum of general education. In some form or other, it is likely to include these general areas: knowledge and ways of thinking about the natural and social world; skills of appreciation and expression in the literary and other arts; moral and other forms of practical judgment. As we have seen, the Wyndham report and the later inquiries into secondary education and the Schools Commission have all advocated a curriculum of general education with dimen-

sions essentially the same as those just outlined. Perhaps those who make curriculum decisions at a local level should be required to work within a common framework of general education. Certainly everyone should have an adequate opportunity for such an education in the school.

Perhaps the most satisfactory way of examining the issue of a core curriculum is to focus on what values, knowledge, dispositions, and so on need to be developed as common ground sufficient both for the cohesion of the society as a whole and the protection of the diverse cultural groups within it. Respect for different values and traditions and the conduct of a civilized debate between conflicting interpretations of the public good depend on an underlying agreement about values and procedures. The content of this agreement might form the central focus of a common core curriculum of social education. The first step towards such a curriculum would be to examine the state of the underlying consensus within the Australian society and the values that should be accepted in a pluralist society.

Some General Themes in the Present Theory and Practice of Australian Education

In this final section I wish to draw attention to several general themes of educational theory and policy that have been prominent in the recent past and will continue to hold a central place in the future debate on education in our society. Specifically, I shall comment on four such issues:

(a) the social ideal of equality and how it might be realized in and through the process of education;

(b) the closely related question of our preoccupation with schooling and the values we place on it;

(c) authority in the practice of education;

(d) linked with the third theme, the question of the degree of unity and diversity that is desirable in education, particularly in relation to the pluralist character of our society.

To some extent these issues have already been raised in the discussion of theories about secondary education and the curriculum. Here I shall comment on them more directly and shall refer particularly to the reports of the Schools Commission and that of the Interim Committee.

Equality and Schooling

As we saw earlier, the highly centralized system of education in Australia was defended, in part, on the ground that it was able to prevent gross differences in the quality of the conditions of schooling and to ensure that everyone had at least an adequate opportunity for education. (The justification of the central system appealed to other values as well as equality — in particular, to economic efficiency and the development of a unified civil community.) The preparation and selection of people for jobs in the rapidly developing industrial economies has always been one

of the major objectives of the systems of public education. After the Second World War, the link between level of schooling and occupational opportunity was greatly strengthened in Australia; and the dramatic increase in the percentage of enrolments in the later years of the secondary school and in tertiary institutions reflected the conviction that higher levels of schooling generally led to jobs of higher income and status.

In Australia as elsewhere, the link between equality and education has generally been interpreted as equality of opportunity. The element of equality has usually formed part of a meritocratic view of society. Given equal conditions of schooling, the more able members of any group in the society can gain access to the positions of economic advantage and power through their personal ability and effort. As awareness of the conditions that affect scholastic achievement grew sharper, the efforts to ensure equality of opportunity for educational achievement became more complex. In the United States during the 1960s, special programs were launched to help the members of socially disadvantaged groups improve their individual and collective position in the society. Some even hoped that such programs would significantly reduce poverty and contribute to a more equal distribution of income and political power. In Great Britain, the Plowden Report (1967) advocated a policy of 'positive discrimination' in the education of disadvantaged groups. In May 1973, the Interim Committee for the Australian Schools Commission prepared a blueprint for the new Labor government's policy to improve the conditions of education in Australia by a massive increase in commonwealth funds. It is not surprising that this Committee's main theoretical framework was built on notions of equality and equal opportunity. The framework was developed as the central focus of theory in the first two reports of the Schools Commission (those of June 1975 and July 1976). On the basis of this theory, the Schools Commission recommended a system of differential grants intended to upgrade the resources of schools that fell below a standard determined in relation to the average for state schools in 1973. Additional funds were recommended to schools serving areas identified on a number of criteria as being socio-economically disadvantaged.

These recommendations can be defended, I believe, with very little reliance on principles of equality or equal opportunity. If it is agreed that there is a certain minimum level of education that is necessary (or desirable) for everyone in the society and that the chance of attaining this level depends, at least in part, on the material resources of the school, it is reasonable to give priority to the upgrading of schools with relatively poor resources and to provide special assistance for those whose circumstances make it particularly difficult to reach the desired minimum standard. It may be argued — as in fact the report of the Interim Committee does — that this policy is justified even if improved material resources make no

appreciable difference to educational attainment (or if compensatory school programs do not significantly affect social and economic disadvantage). The policy at least helps to make the experience of schooling more enjoyable for many more students. To distribute limited resources unequally on the basis of relative need is to follow a principle of fairness. The consequence of the Schools Commission's program is that the disparity in material resources between schools is substantially reduced and, to the extent that these resources influence educational outcomes, the opportunities for educational achievement become less unequal. However, the program has no bearing on equality of educational outcomes among individuals (although the compensatory programs may improve the average level of disadvantaged groups), or on the development of a society in which inequalities (even of a gross kind) in incomes, job satisfaction, status, political power, and so on are removed. The extent to which compensatory school programs can put the disadvantaged in a better competitive position for the prizes of our society is doubtful.

Despite all this, the Schools Commission has persisted in defending its program by a confused amalgam of beliefs about equality and equal opportunity. The main elements of its position, which is by no means an uncommon one, may be stated briefly as follows:

(a) The principle of equal opportunity and the ideal of an egalitarian society tend to be treated as though they were aspects of a single theory of human equality.

(b) In applying the principle of equal opportunity, a clear distinction is not maintained between opportunity for the good we call education and opportunity for economic and other goods in the society to which education (or, more precisely, schooling) happens to give access.

(c) Different levels of funding and other compensating treatment are related not only to equal opportunity but to equal educational outcomes as well.

(d) The Interim Committee and the Schools Commission have been tempted by the rhetoric about the school curriculum reflecting the values of the middle class (or the dominant social group) and serving its interests. They also seem to be influenced by a related doctrine to the effect that there is no such thing as cultural poverty.

(e) Despite various warnings about the limited capacity of the school to effect social change, the reports of the Interim Committee and the Schools Commission are nevertheless substantially optimistic.

In general, the Commission's policy on schools and equal opportunity has, I believe, unwittingly encouraged the prevalent utilitarian valuing of education as mainly instrumental to social and economic advancement, and the tendency to increase the years of formal schooling required for entry into many jobs. In regard to objectives of social equality, unfounded confidence in the power of schools distracts attention from the direct action that needs to be taken to overcome poverty, gross inequalities of

income, and the social conditions that systematically deny certain individuals and groups an equal opportunity for commonly desired goods. A current form of this misunderstanding is the tendency to blame the schools (rather than conditions in the economy) for the sudden and sharp rise in youth unemployment and to expect the schools, presumably in their educational role, to play a major part in its solution.

There is an important element of the Commission's policy that I think should be made the dominant theme of differential grants and other treatment in schooling. It demands close attention to the quality of what is done by schools in the name of education and to the level and range of educational attainment that is desirable for everyone in our society. (The criteria must be concerned with education for the broad quality of life and not only for its use in the job market.) Then, the program requires the application of funds and human effort quite unequally (both inside and outside the school) to ensure that, as far as possible, each individual in our society has an appropriate opportunity to reach at least the desirable common level of education. The primary and secondary schools would need to be supported by flexible institutional forms that would enable adults to return to general education. In this program, the schools might have a reforming impact on society through the diffusion of a much more thorough understanding of the issues affecting social justice and a capacity for action informed by critical reflection and imagination. It should be emphasized that, for individuals, neither equality of treatment nor of outcomes is particularly significant in the practice of education, and that the moral equality of persons has nothing to do with their educational attainments.

The Extent of Schooling

Neither the Schools Commission nor any of the reports discussed earlier gives serious attention to the deschooling arguments of Goodman, Reimer, Illich, and others. In fact, the tendency has been to favour attendance by everyone for the full period of secondary schooling (five to six years). The arbitrary requirement of increasingly higher scholastic credentials for many jobs and the use of the school as an instrument for socioeconomic mobility and selection have motivated many people to stay on longer at school. When scholastic credentials fail to deliver the anticipated material goods in times of high unemployment and other economic difficulties, there is often disillusionment about the value of the additional years spent at school. Although the diagnoses and alternatives offered by the deschoolers may be defective in many details, I believe they have correctly pointed out serious weaknesses in our practice of requiring (or encouraging) so many years of secondary schooling for everyone.

It would be desirable, I believe, to modify the direction of our present policies and practices as they affect secondary schools (and are increasingly being felt at tertiary institutions). Changes need to be made

towards these broad objectives: (a) to reduce the role of the school as a credentials agency by putting the main onus of selection on the places of employment and other institutions to which people apply; (b) to ensure that specific levels of secondary education (or tertiary degrees and diplomas) are not conditions for entry to a job unless they are related to the skills it requires; (c) to provide a variety of alternatives to schooling for adolescents, after the age of 14, who simply have no interest in continuing any kind of systematic full-time program of general education; (d) to develop a sophisticated apprenticeship system for all kinds of trades (and professions), in which educational institutions would collaborate; (e) to provide a variety of formal and informal agencies of systematic general education to which people would have access throughout their adult life. In summary, I think we should at least give serious consideration to Goodman's claim:

> By and large, it is not in the adolescent years but in later years that, in all walks of life, there is need for academic withdrawal, periods of study and reflection, synoptic review of the texts. (Goodman, 1969:103)

Authority in Education

One of the most significant changes in the provision of education in Australia over the past decade has been the partial devolution of decision making from the central state departments to regions and individual schools. As we saw earlier, the degree of centralized control and rigid uniformity had been one of the most persistently criticized aspects of the Australian system of education. The slackening of tight central control began in the late 1960s. It affected particularly the role of individual schools in curriculum planning. The policy of devolving authority in the school system received strong endorsement in the reports of the Interim Committee for the Schools Commission and has been enthusiastically supported in all the reports of the Commission itself. Next to the issue of equality and equal opportunity, it has been the major continuing theme; in the report of April 1978, it was the dominant topic of discussion. I wish to refer briefly to the Commission's interpretation of the individual school's authority in the government system and some of the issues that remain unresolved.

The reports of the Commission and its forerunner present a fairly consistent general picture. In the first place, they advocate a large measure of autonomy to individual schools in what they do. Three main arguments are offered in the reports for this position: (a) Teachers are likely to act with more responsibility and commitment when they are entrusted with making the decisions themselves rather than being mere instruments of the will of others (for example, SC, 1973:2.4; 1978:1.11); (b) Because the characteristics of students vary from one school to another (schools are not, in fact, socially comprehensive), their educational needs can best

be determined at the local level (for example, SC, 1975:11.9); (c) As there is no agreed standard recipe for education or a unified body of educational theory from which conclusions can be drawn for all circumstances, the teacher engaged in the particular task must be responsible for determining what action is educationally most suitable (for example, SC, 1976:2.17, 2.22; 1978:1.12).

At the same time, the reports emphasize certain constraints on the independence of teachers at the level of an individual school in the government system. The devolution they envisage is to the local community and not simply to the school. They seem to distinguish between the 'school community' (which includes teachers, students, and parents) and the wider local community. None of the reports makes clear what the Commission believes about the authority of the various participants at the local level in determining the educational philosophy and program of the school. Parents seem to be given an equal determining role with teachers, and the views of students are to be taken into account. The contribution of others in the local community remains obscure.

Despite occasional comments that suggest virtual autonomy for local communities in education, all the reports acknowledge that individual schools and their communities are constrained by certain decisions that are appropriately made at state and national levels. Most of the comments on this theme refer to the relationship of individual schools and the state system. The report of April 1978 (SC, 1978:1.5, 1.9) is the most explicit on the point that for public accountability the final authority remains with the central administration of the state system, that responsibility is delegated by this authority and is never unqualified.

This and other reports refer to the broad areas in which central decisions are necessary: on the distribution of resources in order to maintain basic equality (for example, Interim Committee, 1973:2.5; SC, 1978:1.5); and on the common framework of educational objectives and the core of knowledge and other skills that all schools are expected to promote (for example, Interim Committee, 1973:2.21; SC,1975:1.26). In relation to the latter, the Commission seems to follow the division of labour in which the central authority determines the ends and the individual school determines the means. The intention of the Commission is not entirely clear; it also speaks of those at the local level identifying the objectives (for example, SC, 1978:1.24). In any case, the distinction can be a difficult one to apply in education because many of the important educational outcomes logically require the adoption of certain ways of proceeding. Students will not come to a critical understanding about political and economic systems, for example, unless the relevant conditions of critical inquiry are observed in the procedures of teaching and learning. Moreover it may be the responsibility of the state, acting on behalf of the interests of children or the society generally, to require or proscribe certain methods of schooling. The 1975 report states:

> There is an urgent need for analysis to be made of decisions which are most appropriately taken at school, regional, or system level in order to clarify the notion of 'participation' and the various kinds of involvement possible at different levels. (SC, 1975:11.9)

The problem of confusion is again acknowledged in the 1978 report. In the relationship of the individual school to the system and to its local community, there is said to be 'an unexplored hinterland'. The report suggests:

> There could almost be said to be a drift of educational decision-making power towards the school going on without sufficiently conscious planning of the preconditions necessary for its responsible exercise there. (SC, 1978:1.22)

In the next paragraph, the report provides a good summary of the main uncertainties in the devolution of decision making and of the issues that need resolution. Despite its expression of concern, the Commission has seemed reluctant to penetrate beyond the surface of the complex theoretical issues involved. In the 1976 report, the question of how far local community control of educational outcomes should go was set aside as 'at present a somewhat academic question' (SC, 1976:2.24). In the 1978 report, the Schools Commission (1978:1.26) seems to support a fairly pragmatic approach: 'Let the demarcation of responsibilities arise out of the experience of local decision making and reflection on it.'

Unity and Diversity in Education

The encouragement of diversity in educational theory and practice from one school to another is a corollary of the Schools Commission's arguments for the devolution of decision making. It marks an extraordinary departure from the hostile attitude to diversity in education that had prevailed in Australia since the beginning of the state system. The ideal was 'the common public school with a common public education'.[4] There was deep resentment even of a dual system, and religion was virtually the only issue on which diversity in education was considered. The report of the Interim Committee stressed the need for differences in the practice of schooling within the public system as a response to the different conditions and requirements of students from one district to another. It also encouraged the establishment of alternatives to the public schools. However, in addition to the constraint of economy, it proposed to qualify its support in the interest of two objectives: to secure equality in the provision of education throughout the society; and to protect the 'strength and representativeness' of the public system from dilution (Interim Committee, 1973:2.13). It is obvious that only a very small-scale development of alternative schools could be compatible with the second objective. The reports of the Schools Commission itself have increasingly emphasized the diversity that can exist among schools, whether government or private, because of differences in interpreting the nature of education and in

judging the kind of program, methods, style of organization that is educationally most appropriate. This basis of diversity does not fit neatly with school districts. The Commission has recognized that, once differences at this level exist among public schools, there should be as much opportunity as possible for parents, students, and teachers to choose the school that is most compatible with their view of education. The Commission has referred to various practical ways in which choice of this kind can be provided within the public system — for example, 'mini-schools' within a total school institution, the removal of area restrictions on enrolments, co-operation among several neighbouring schools in order to offer a choice of different approaches to education more efficiently (SC, 1978:9.16).

The Commission's general argument for such choice is, I believe, a sound one. There are several fundamentally different, incompatible ways of interpreting the nature of education. Individual schools should have a large measure of freedom in adopting an educational philosophy and program. Inevitably, some parents, students, and teachers will find the style of education in the school to which the system assigns them unacceptable. As far as possible, therefore, they should be able to choose a school whose approach is more compatible.

While the Commission is correct in rejecting *a priori* efforts to delineate responsibilities, there is an urgent need for the evolving practice to be guided by a clearer understanding of the scope and basis of the authority exercised by the various participants. In particular, close attention needs to be given to questions about the authority that parents have in determining the educational program of the school, the authority that teachers, both individually and collectively, can claim as experts (and the extent to which they may be entitled to some form of academic freedom), and the kind of authority that the state may legitimately exercise over the practice of education. In reference to the last question, the prescription of a common curriculum needs to be related to the state's responsibility to protect the common good (or public interest) as distinct from the special interests that local communities and other groups seek to advance through schooling. The role of the state in Australian education should also be closely scrutinized in terms of the distinction between the provision of resources for schools and the general supervision of standards on the one hand, and the establishment and administration of a school system on the other. To ensure that everyone has an adequate opportunity for education, there is no doubt that public schools need to be provided. It does not follow, however, that the state's proper role in education depends on systemic units of the size we have in Australia or on the kind of systemic control that still exists.

If the move to a more decentralized pattern of public schooling is to be fully effective (particularly in the detailed planning of educational programs), it is essential that there should be some local control over the appointment of teaching staff. This is one of the most serious practical

issues. The Schools Commission (1978:9.10) has pointed to the obstacles that still exist in the state systems (the central education department, the trade unions, the promotion procedures) as well as concern about the equal distribution in the quality of staff among schools. There is an urgent need to devise procedures for effective participation by schools in decisions on the transfer and appointment of staff.

In summary, the Schools Commission is surely correct when it claims that the development of a proper balance between the freedom of individual schools and the political responsibility of those who have authority in the system as a whole is among 'the most important tasks facing public education in Australia' (SC, 1978:9.25). In working at this task we should not take the present scale of the systemic level for granted.

There are implications of this argument as well as other relevant issues affecting public policy in education that will need closer examination and discussion in the immediate future. In regard to implications, the argument clearly shows how fragile the notion of the comprehensive school is. Not only are many of our schools far from socially representative but, given that they should be free to work out their own approach to education, it is extremely unlikely that they could effectively accommodate the conflicting interpretations of education in the community they are intended to serve.

Once choice of the kind we are considering is admitted within the public system, it would seem that equal treatment should be given to those who choose a non-government school or set up an alternative because they support an interpretation of education not available to them in a public school. An education informed by a religious view of life is simply one of many possible interpretations that may not be available in a public school. A preoccupation with the 'threat' of religion-based schools to the integrity of the public system is really an anachronism. Apart from religious and secular 'philosophies of life' that may affect the whole educational program, there now exist in Australia many different cultural perspectives, any of which could provide the basis for a style of education that is not available in the public school. Given the Commission's argument, there seems to be no justification for the Interim Committee's commitment to preserving the 'strength and representativeness' of the public system. A better alternative would be to re-examine the notion of 'public' as it applies to the practice of education in our society.

On other issues that must be taken into account, the Commission itself refers briefly to those of equality and social cohesiveness: 'extended choice and variety may exacerbate inequality and may conflict with other values such as cohesiveness which the public school system ideally represents' (SC, 1976:2.27).[5] The value of freedom of choice, which is central to the Commission's argument for diversity in education, will at certain points conflict with that of equality. In education as elsewhere, we cannot fully realize both ideals together. Some defensible balance between the

two will have to be struck. Without this, public policies for education will inevitably lack consistency and a sound justification.

At the present time, the question of social cohesion is perhaps a more pressing one. It relates directly to the general debate about the appropriate normative model for the pattern of pluralism in our society. In education specifically, it is a general issue in the current discussion of a common (core) curriculum. In addition to seeking for a range of learning that will form a common ground of knowledge and values for all members of our society, it will also be necessary to consider what values or procedures may not form a legitimate basis for diversity in education.

The themes to which I have referred in this final section are, I believe, critical in the present stage of educational thought and practice in Australia. Their treatment by the Schools Commission has been somewhat derivative and eclectic, and has certainly been incomplete. However, the existence of a public national body examining these questions over the past seven years has contributed significantly to the development of a reflective educational practice in Australia. The future role of the Schools Commission is itself a question that deserves careful discussion. Rather than being reduced to the dimensions of a budget advisory committee, the Schools Commission should be strengthened in the part it has played in exploring the guiding theoretical framework of public policy and in encouraging a more informed critical debate in the society generally. As the Interim Committee (1973:1.7) observed, 'in the long run, consideration of the purposes and values of Australian education is of greater importance than any short-term accretion of resources'. What we urgently need is more systematic work on the theoretical bases of our public policies in education.

Notes

[1] For statistics and views on the recent development of Australian education I am indebted, in particular, to the following: Australia. Committee of Inquiry into Education and Training (1979); Australia. Schools Commission, (1979); Australia. Tertiary Education Commission (1979); Barcan (1972); Fitzgerald (1970; 1972); Jones, (1974).

[2] The following writings have been particularly influential in curriculum theory during the past two decades: Bruner (1968); Hirst (1974); Phenix (1964); Young (1971).

[3] For a selection of such writings, see Gross and Gross (1969). The main 'deschooling' case is presented by Goodman (1964); Reimer (1971); Illich (1971).

[4] From a speech during the education debate in the Victorian Parliament, 1867.

[5] Compare Radford's comments in the introduction to Fitzgerald (1970:vii):

> In a situation where, as I suspect, there is no true consensus, by such advocacy of autonomy [for individual schools over curricula and assessment] we run the grave risk of fostering a multiplicity of sets of purposes determined by the profession alone and imposed on the generality and community of men.

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Australian Society in Change — A Sociological and Political Perspective

Don Aitkin

This is a personal essay, not a research paper. I find that musing about the future lends itself only a little to the style of work that is usually labelled research, and those attempts at hard-nosed futurology I have seen have been rather quickly disposed of by events. At the same time, idle speculation is usually enjoyed only by the speculator. In what follows, I argue that in what remains of the 20th century the continuity of things in Australia will be much more marked than their change; my guesses about the future will be offset to some degree by some rather harder knowledge about the past.

The Stability of the Social and Political Order

It is part of our culture to emphasize change, novelty, discontinuity. Indeed we celebrate change in hourly news bulletins, which purport to be an accurate account of what has happened which is 'new'. As others before me have remarked, the news contains a great deal which is not new, and much else that is highly predictable. But we thirst for it: we like the excitement, the sense of drama and action, that goes along with the news. And that disposition, it seems to me, inclines us generally to look for evidence of change and magnify what we find. In speaking of election results, for example, commentators use 'landslide' to refer to an increase of 5 per cent in one party's share of the vote. Some two-thirds of the seats in any Australian parliament are safe, and their occupants need worry only about knives in the back or the redistribution commissioners' axe: but on any election night the assumption is that every MP could go.

It is not my intention to seek change in all this, but merely to point out that the emphasis on what is novel tends to distract us from what is not, and in general to make mountains out of molehills. Let me begin, then, by pointing out what seems to me to be a set of very stable elements in

politics and society, institutions, and procedures which are important to education and unlikely to change very much in the remainder of the century.

First, the political system — virtually all our major institutions are very old indeed, even by international standards, and their form has not changed much. Responsible government and manhood suffrage are 125 years old, the system of state education about 100 years old, the federal system is 80, the party system is 70, the arbitration system is 75. The political parties themselves are ancient: Labor is 90, the Liberals 70, the National Country Party 60. What is more, if you carry yourself back to say 1910 you will find that the parties presented themselves and attacked their opponents in very much the way they do today. And the issues that are on the agenda of Australian politics have been much the same for a hundred years. Again, we tend to stress the newness of them — the details peculiar to a particular time and place — but you will find that employment and unemployment, immigration, industrial relations and so on have been almost continuously before Australian politicians, and in very similar ways, for a century or so.

Stability has a multitude of causes, some obvious, some not so obvious. Australia has been spared invasion, and for a long time the homogeneity of its population and its essentially single cultural heritage reduced the likelihood of many sharp cleavages in society. Australian politics early became a contest for mostly economic goods, and most clashes in the body politic could be solved by some kind of sharing-out of money or its equivalent. There have been major changes in the workforce in the last hundred years — most notably a massive movement away from rural work and into the urban areas — but in class terms the shift has been minimal: a workforce 68 per cent working-class in 1911 was 62 per cent working-class in 1966, and the changes since are unlikely to have been important. The urban character of Australian life has been marked for a century at least, and results mostly from the fact that the good arable and pastoral land was occupied by 1890.

The character and style of Australian politics were set very early in the century, and have been the despair of democrats ever since. What happened was not peculiar to Australia, by any means; but it happened here earlier than in most other countries because male and female suffrage occurred earlier. Political theorists of the 19th century — at least, those of the democratic persuasion — were convinced that the key to democracy lay in the franchise. Once every man and every woman had the vote, the millennium would arrive, because it seemed obvious that the common people would elect to office representatives who would serve their interests and not those of the ruling class or the idle rich. In fact, as we know, that did not happen. What eventuated, instead of 'real' democracy, was political parties.

It is now possible to explain why parties have so dominated the 20th century. In part the reason lies in the complexity of politics and government: parties act as simplifiers, and simplifiers are needed because the average citizen (indeed, the well-above-average citizen) cannot deal with the choices that are available without them. Parties present choices in an ideological way, by which I mean that they present choices in the context of an account of the way the world is and might be, its villains and heroes. These ideologies grow out of the experience of more or less coherent groups of people — workers, farmers, Catholics, and employers, in the Australian experience — and are adopted by them. Individuals adopt one party rather than another because its account of the world is simply more satisfying, more believable, than those of its rivals.

The early development of political parties was understandably uncertain, but by the beginning of the 20th century they were here to stay, and by 1910 they had settled into a system, a system so powerful that it has shown little sign of change since, despite two world wars and a major depression. Moreover it is the party system that links the citizen to the political process. Although only 4 per cent of the electorate belongs to a political party, 86 per cent think of themselves in party terms, the great majority very strongly or fairly strongly so. The hold of parties has been as strong as this since the 1920s at least.

Partisanship is very important in understanding change. The party system survives because of it, and because by and large parents pass on their own loyalties to their children, usually unconsciously. But partisanship has some unfortunate effects. First, since such a large proportion of the nation is already committed, the opportunity for new parties to develop is reduced almost to nothing. I wish the Australian Democrats nothing but good, but I fear for their future. Second, partisanship is the only political expression of two-thirds of the nation – apart from voting, which is the way people act out their partisanship. Third, it is unfortunately the case that the most interested and active citizens in politics are also in large part the most partisan: in consequence, it is hard for non-party perspectives to be given attention, while worthwhile initiatives from any party tend to be rejected out of hand by its opponents, until they have taken over the initiatives themselves. Bi-partisanship is rare.

I have spent some time on these matters because for me they are the essential background to interpreting the politics of the present and guessing at the politics of the future. Interest groups will remain important — the success of the Council for the Defence of Government Schools in getting the state aid case heard in the High Court is good evidence — but policies of all kinds are made and unmade finally inside the political parties, and that will continue to be the case. To those who argue that the present period represents a distinct break with the past, and that the coming 20 years will be really *sui generis*, I would point out that the proportion who accepted a party label in 1979, 86 per cent, was only a little less than

the proportion accepting one in 1967, in the bygone good old days — 89 per cent. I see little sign that party identification is set in a downward trend.

A strong party system, dominated by the Labor and Liberal Parties, with the Democrats fading away and the National Country Party always in danger of incorporation, seems to me the first essential ingredient of Australia's next 20 years. Along with it is a body of citizens few of whom take an active part in politics. The citizens will be more active than has been true in the past, because they will be better educated: I'll return to this theme later. But we are unlikely to see any substantial change in our politics from the grass roots. Nor are changes in prospect in the higher realms. Australia is run by governments, and has been since 1788. Australian education likewise has been run by governments. There may be some changes in direction, with the States gaining power they lost during the 1960s and 1970s, though for many reasons I think that unlikely. But the educational bureaucracies are among the most powerful in the government sphere, and they have cornered a decent share of government expenditure; I expect them to hang on to it.

I should say something about three other trends. My own expectation is the family formation will continue at a rather subdued rate, and that the nuclear family, in touch with its relatives via the car and the telephone, will continue to be overwhelmingly the most common social unit. Communes and the like will continue to be statistically rare, though accepted with more equanimity by others. Divorce will continue at a higher level than was true 20 years ago, but then so will remarriage. A greater proportion of children will know two distinct families during their growing up. I can imagine being persuaded out of these views, but not by linear extrapolations which go on indefinitely.

Secondly, I accept that Professor Borrie has got it right, and that we are unlikely to have more than 17 500 000 Australians by the end of the century. I know that demographic predictions are among the shakiest, but the argument that Borrie gives us seems persuasive to me. If population growth is to be subdued in comparison with the first quarter-century after the war, then the education system can grow only through higher participation rates. The most likely short-term future is one of stasis.

Finally, if Borrie is right, then we cannot depend on either immigration or family formation to provide the engine for high rates of economic growth. The optimists forecast a very wealthy Australia, with iron ore, coal, gas, uranium, and other mineral resources far surpassing our traditional primary industries as wealth-earners. Resource extraction does not provide much employment directly, and there seems a good deal of uncertainty about whether all this wealth can be shared out more or less fairly and usefully. At the same time, the pessimists, worried mostly by the silicon chip and glass-fibre technology, see whole sectors of the economy reduced to minuscule employment before very long. If both

optimists and pessimists are right (as in this case they can be), then we could have a wealthy unemployed Australia, which would certainly be a radical change from the past. I suspect that neither the wealth nor the unemployment will be as great as predicted, and that in fact the 1980s and 1990s will present very familiar problems of political economy. At all events, these problems will not pose impossible demands for the political system.

In short, there seems no reason to suppose that in the next 20 years there will be major changes in politics or society which would have a consequent effect on the educational system. In saying this, I am excepting wars, pestilences and plagues, successful invasions, or *coups d'état*. But such is the resilience of the Australian political system that I would expect it to cope more or less successfully with all but the last two.

The Postwar Impact of Education

Much was expected of education after the second world war. Just as the 19th-century theorists had put their eggs into the franchise basket, so did the post-war 'reconstructers' put theirs into the education basket. Equality of the vote, it was clear, had not worked because it was insufficient to guarantee equality of access to power. Power would be shared only when there was equality of educational opportunity, if not of educational experience. Both my parents were teachers, and I can remember the dinner-table aftermath of such New Education Fellowship discussions in the 1940s. If working-class children were able to complete their schooling and go on to university or wherever their talents might lead them, there would be a breaking-up of the classes and a more genuinely democratic society. By and large these views were held on both sides of politics. Only the hard and far Left rejected the widening of educational opportunity, and then on the ground that it would delay the day of revolution. The more far-sighted conservatives welcomed it for precisely the same reason, while many Liberals and the great majority of Labor people, having been denied a decent education themselves by family circumstances, were determined that their children (real or symbolic) should enjoy it.

The economic boom that began in the 1950s, coupled with the fact that non-Labor governments after the war were as interventionist as their Labor opponents, meant that education was one of the best-endowed divisions of the public enterprise. State education departments displaced railway departments as the largest single state employers, and teachers' salaries came to be the largest single item in state expenditures. A relaxed attitude to the use of loan funds meant that new school buildings began to appear in suburbs and towns. At the federal level, spending on universities began to increase rapidly after the Murray Report in 1957, and a comparable initiative a few years later produced a system of colleges of

advanced education, again heavily dependent on federal funding. In 1974-75, federal expenditure on education had reached nearly 10 per cent of its total outlay, while the outlay on education of all three levels of government represented 16.3 per cent of all expenditure by governments. This proved to be the high point. Federal expenditure on education, which had more than trebled proportionately since 1968/69, began to fall back slightly, while the total outlay has remained virtually static since.

Cause and effect is a hard relationship to prove in the social sciences. Let me say, uncontroversially, that the great increases in spending on education accompanied substantial improvements in the intellectual quality of Australian life, even though there will not be complete consensus about what is to count as an improvement. For me there is no doubt at all about the improvement in the quality of Australian newspapers since the 1950s, or the improvement in the quality and quantity of public affairs television and radio programs since the 1960s. The standard of MPs' contributions to debate has gone up perceptibly, even if their style has not. The great increase in the output of the Australian Bureau of Statistics, the very impressive research that has been commissioned by the very much larger numbers of the senior levels of the various bureaucracies — these are all concomitants of the expansion of education that began in the 1950s. Our better-educated population is more effective politically and more interested in culture (or perhaps 'high culture'): the flourishing literary journals, the great interest and support for the development of Australian literature, music, ballet, opera, and craft, as well as the flair and pertinacity of interest groups like the Women's Electoral Lobby, the Friends of the Earth, the Council for the Defence of Government Schools, and the Festival of Light, all point to the fact that the Australian population has become not only more affluent in the last 20 years, but substantially better educated as well.

Again, these points are worth making because the education system has come in for a lot of criticism in the past five years. When the long boom ended in the mid-1970s and people searched for causes, faults in the education system received particular attention. We had been training too many white-collar and too few blue-collar people; the schools were turning out products who could not read and write, no matter that they knew a lot about rock or racism; students were being given unreal expectations by their teachers; students spent too long in formal education; teachers and particularly university teachers had an easy life; education was just irrelevant to society's needs, and we should get back to the three Rs. None of this was really new, but in a state of continuous economic growth such criticisms carried little weight. After 1974 they made more impact, and it is probably true that, whatever government had been in power in Canberra in the late 1970s, the cutbacks on education spending would have occurred.

We are now in a static situation. Education departments are reducing their intakes of new teachers, universities have been in a 'no-growth' phase for five years, research is not expanding. Although there has been no recent survey evidence of attitudes to spending on education, it is likely that education authorities no longer have a supporting constituency in the electorate; education certainly has a bad press. How likely is this to continue? For tentative answers, we need to consider the changing electorate, and the party system.

The Changing Electorate

In this section, I want to dwell on some survey evidence collected in 1979 which was in part designed to see what changes had occurred in the Australian electorate since 1967. The latter data have been explored in my *Stability and Change in Australian Politics* (published by Australian National University Press in 1977), while the 1979 data will be dealt with in the second edition of this book, which should appear in 1981. Perhaps the first thing to notice is the change in the educational experience of the electorate, already mentioned; this is depicted in Figure 1. Twelve years may seem too short a period to produce a change in which the proportion with at least complete secondary education has moved from 35 per cent to 61 per cent, and the proportion with some experience of post-secondary

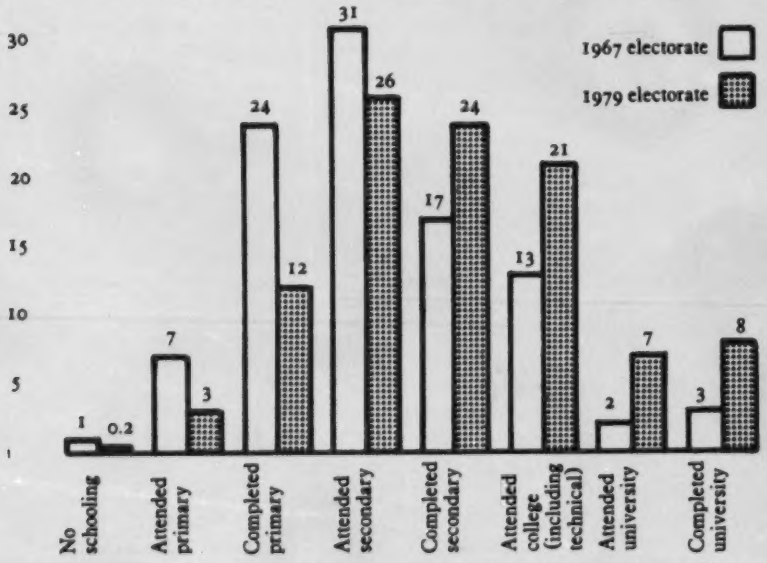


Figure 1 The Educational Background of the Australian Electorate, 1967–79

Table 1 Interest and Participation in Politics, 1967 and 1979

	1967 %	1979 %
Have 'some' or 'a good deal of' interest in politics	55	71
Follow politics in newspapers	40	48
Follow politics on television	34	59
Follow politics on the radio	17	32
Talk about politics with others	30	45

education has doubled: 18 per cent to 36 per cent. The explanation is twofold. The change in the electorate reflects death as well as coming-of-age and naturalization, and since those who died between 1967 and 1979 were very likely to have had low levels of formal education, the effect of educational changes since the war has been enhanced. Secondly, a change in the *Electoral Act* enfranchised those aged between 18 and 20, and they were likely to have had higher levels of formal education than those older, again enhancing the effect of educational advance. If present levels of formal education are simply maintained, half of the electorate will by 1990 have experienced some kind of post-secondary education. (This expectation depends to some extent on the continuance of present patterns of naturalization, since several hundred thousand immigrants who are entitled to naturalization have not become citizens and show no present inclination to do so. Their educational experience is very probably lower than the present average.)

These changes in formal education have been accompanied by considerable increases in political interest and participation. Table 1 provides some comparisons.

There are signs of greater sophistication, too. In 1967, only 19 per cent thought of the political parties in terms of 'left' and 'right' (the stock in trade of journalists and commentators), and 29 per cent thought of themselves in this way. By 1979 these proportions had jumped to 37 per cent and 42 per cent respectively. Rather more citizens than in 1967 knew the names and parties of their federal and state MPs. In general, the proportions who were uncertain or had no opinion on questions about contemporary issues dropped from about 12 per cent to about 3 per cent over the 12 years. On the other hand, the proportion joining political parties was no greater in 1979 than in 1967 (which corroborates other evidence), and the proportions reporting that they belonged to organizations and were active in them were likewise no greater than in 1967. Summaries like these can raise more questions than they answer, yet to me it is clear that, in comparison with the mid-1960s, the present electorate is better educated, better informed, more confident in its attitude to issues, and more interested and knowledgeable generally, but not noticeably more active in joining or participating. (Though there are no comparative data on these

Table 2 The Choice between Spending and Reducing Taxes, 1967 and 1979

	1967 %	1979 %
The government should reduce taxes	26	59
The government should spend more on social services	67	36
Don't know, no opinion	6	5
	100 N = 2030	100 N = 2010

matters, it is perhaps worth knowing that 17 per cent report having written a letter to an MP or a newspaper on a political matter, and that 12 per cent claim to have taken part in a protest movement or a demonstration. I expect these proportions to rise slightly in the coming decade, since the first in particular is related directly to competence flowing from formal education, the second less so. My guess is that both proportions are twice as high as would have been revealed by similar questions asked in 1967.)

What can we say of attitudes to education of the 1979 electorate? Alas, nothing directly. But there are some hints. Many of the questions asked in both surveys touched on matters of government policy or on general alternatives available to policymakers. 'If the government had a choice between reducing taxes or spending more on social sciences, which do you think it should do?' is a good example. Table 2 supplies the responses for both surveys. In general, wherever there was a spending alternative in 1967, the electorate favoured spending; in 1979, with the single exception of defence, the electorate favoured something other than spending. Where the choice had to do with matters of personal morality (homosexuality, abortion, drugs, censorship), the 1979 electorate was a good deal more sympathetic to the rights of the individual than the 1967 electorate. Where the matter in question was the performance of the government, or the capacity of the political system to deal fairly and efficiently with ordinary people, the 1979 electorate was a good deal less impressed with 'Australia's basic soundness' (as a respondent put it in 1967) as those of the earlier year. I interpret all this, rather hesitantly, as portraying a contemporary doubt that governments have the answers to major problems and, if this is not too strong a term, the presence of a kind of libertarian selfishness. It is possible that most of the problems that are susceptible to solution through injections of public funds have been solved that way, and that the electorate realizes this. But I fancy that the present Prime Minister is more in tune with the electorate than many of his critics believe, and that attempts to cut back on government spending are quietly applauded by people who profited from that very spending when they were younger, but now feel that people ought to stand on their own two feet. I hope I am being ungenerous.

In summary, those expecting a revival of support for the claims of the education system in the disbursement of public money are going to be disappointed if they are relying on the mood of the present electorate. I expect this mood to last for a few years, especially if the assumptions made earlier about slow and uncertain economic growth and relatively slow growth in population are proved correct. The stresses placed on the education system by the intakes of the next decade are unlikely to be greater than the system's present capacity to deal with them, and I see no sign that the electorate is likely to place pressures on governments either for an increase in present levels of financial support or (with one proviso I shall deal with in the last section) for new developments that will need extra funds. The major qualification to all this is the unpredictability of the party system.

The Unpredictability of the Party System

Politicians lead the electorate, and are in turn led by it. Both processes occur at the same time, and sometimes each feeds on the other. In 1966 it was electorally damaging to be opposed to the war in Vietnam. That did not deter Dr Cairns and other parliamentary opponents of the war, who kept trying to persuade the electorate that it was wrong. By 1969, the war was on balance neither a vote winner nor a vote loser (perhaps, very marginally, Labor gained by opposing the war), but how much the electorate had been persuaded by Dr Cairns and how much by the circumstances of the war itself it is impossible to say. By 1972 to be in favour of the war's continuance was electoral suicide. Vietnam provides a neat case, but you could not use it to argue that if people campaign long enough against capitalism, then the electorate will finally divest itself of the capitalist system and embrace socialism. There are questions of scale.

Education, in matters of scale, is more like Vietnam than it is like capitalism. The present Prime Minister made some of his reputation as a coming minister in the late 1960s by pushing the concept of colleges of advanced education and making it electorally attractive. Earlier in that decade, a number of politicians, state and federal, reversed what had been settled policy for 80 years by introducing state aid for church schools. This seemed almost madness at the time (I can remember well an incredulous party conference in 1962 which heard the case for the first instalment — and narrowly agreed to it) but persistence won out. Politicians who are alert to the public mood, and Mr Fraser and Mr Whitlam have been two very successful exemplars, can change the attitude of the electorate about major issues by persistent persuasion. It has been done with respect to education before, and there is no doubt that it can be done again. But what are the realities?

To begin with, there seems no enthusiasm for increased education spending on either side, as well as a good deal of unspoken agreement that the various parts of the education system have to be made more

accountable. The notion, beloved of academic staff, that universities (and colleges) are and ought to be autonomous gets little support in any parliament, I should think. As with universities, so with schools, though here the ancient and established state education departments have their own authority. Yet in Queensland, in recent memory, a group of parents and citizens, backed up by politicians, was able to defeat the bureaucracy on such a traditional preserve as the curriculum. In an odd way, the consensus that was visible after the war about the role and future of education has returned, but in reverse. Thirty years of equal opportunity have not produced the true democracy that was envisaged. Certainly very many working-class children did profit from the greater availability of schooling and university education, but the middle-class children profited as much or even more. And many Labor leaders (Mr Calwell most notably) commented sourly that the effect of it all was to turn the bright working-class children into middle-class professionals whose class interest was opposed to Labor.

Paradoxically, Liberals across the party divide wondered if they had created a monster when they saw Australia's universities produce a generation of radicals, many of them from respectable middle-class homes, who seemed to take a perverse delight in biting the hand that had fed them. And the new university products seemed to have lost the old puritan urge to work hard, while setting out with expectations that seemed quite unreal. Like the Labor Party, though for different reasons, Liberals had little patience with the cry for academic freedom and autonomy. Once the Commonwealth assumed full responsibility for the government funding of universities, which it did from the beginning of 1974, federal politicians from both sides began to see the universities as being properly responsible to them. Since the States are most unlikely to ask to share in the funding of universities again, the vulnerability of universities to parliamentary criticism and governmental dislike will remain. The school system is much better protected, but it is open to a greater range of criticisms, and politicians have been among the severest critics.

For some time to come, politicians on both sides will be conservative in their attitude to spending public money. Mr Hayden has made it clear that a Hayden Labor Government would not be a dramatic spender, and he is to be believed, given his record as last Treasurer in the Whitlam Government. To be sure, the chances of a Hayden Government seem much smaller than they did last year, but the party generally seems to me much more sober about the magic of money than it was in the early 1970s. As for the present government, its obsession with keeping inflation down and curbing public spending compels reluctant admiration. Senator Carrick seems to have done well to save the universities from even more severe financial constriction. While the schools have been saved from constriction by the fact of their multiple paymasters (or perhaps by the

multiplicity of funds from which the payments are made), the very size of the school system makes it unlikely that governments will see it as a possible direction for increased spending. Stasis is likely to stay the rule.

On the other hand, should there be a shift in the government's preoccupations, from controlling inflation to do something about unemployment, the educational system could well be a vehicle for change. There are already, it is fair to say, a variety of schemes seeking to improve the transition from school to employment (they rejoice in acronyms like CRAFT, NEAT, RAS, CYSS, and SYEPT), but it is easy to see the schools, colleges, and universities being drawn more fully into the fight against unemployment and its consequences. As against that, I have to confess that, since the burden of unemployment is being felt mostly by those in the 15 to 19 age group, most of whom do not have even complete secondary education, the contribution of the colleges and universities is unlikely to be a major one. Put crudely, it is not obvious that increased spending on education will do much to cure unemployment, although the facilities of educational institutions could certainly be used to make unemployment more bearable.

I have made little of party differences in all this, because it seems to me that at present they are much less important than the similarities. Yet it must be said that Labor is more likely to spend than to reduce taxation, and that the Labor belief that education can do a lot to make life chances more equal is by no means finished. A shift in the political balance which brought in a series of Labor governments in Canberra would, other things being equal, almost certainly result in an expansion of the educational system. At the moment, as I have indicated, the possibility of such a shift in the political balance does not look very great. For those thinking of the longer haul, the statistic most useful for weighing probabilities is that, since 1910, Labor has been in office on average for one year in every four.

In summary, my feeling is that politicians are unlikely to take up the cudgels for education, least of all to preserve it in its present shape. There is widespread political feeling that schools, universities, and colleges should be more accountable, given that they are now such a major source of government expenditure. Labor is on balance more sympathetic to the claims of education, but even less likely to accede to the view that educational institutions should be treated as professional bodies, free and competent to do pretty well what they like. These all seem settled positions, unlikely to change in the short run, or in the long run, if the general view of the likely future put forward earlier proves to be sound.

Nonetheless, there remains the possibility that an astute politician will use an educational issue to promote himself or his party. I can see five areas in which some such initiative is possible; each one will be seen as crucially important by many people and each could have a major impact on the system.

Some Possible Futures

The Return of the State Aid Issue

Should the High Court rule in favour of the Council for the Defence of Government Schools (DOGS) that state aid to church schools is unconstitutional, there will be a first-class political row. Commonwealth government assistance to private schools alone is worth more than $200 million a year just in direct grants. The impossibility of state aid was settled policy for several generations, as I have said; once state aid had been accepted by all the political parties in the mid-1960s, it became settled policy in its turn. The reluctance of all governments and parties to have it interfered with can be measured from the lack of success that DOGS had for many years in finding an Attorney-General who would give them leave to make suit in the High Court.

The fact that the parties agreed to leave it alone does not mean that the electorate felt the same way. The 1967 electorate, though in favour of spending on all kinds of schools (in the 1960s the Treasury must have seemed a bottomless barrel of money), nonetheless included a large group of convinced 'anti-state-aiders'; the issue remains a live one 12 years later. It is possible that victory for the status quo will take a lot of heart out of DOGS and its allies, but my own feeling is that opposition to state aid would continue: it draws much of its strength from a heady mixture of egalitarianism and sectarianism.

Education as Ethnic Politics

One of the major aspects of post-war immigration has been the lack of impact that immigrants have had on the political system. There is not, and has not been, a 'migrant vote', and very few immigrants have become important in Australian politics or in Australian parliaments. This has not been for lack of encouragement: all the parties have made efforts to attract immigrants, and there are no barriers of any importance to a migrant's pursuing a political career. The explanation lies in part in the migrants' felt need to establish themselves economically above all else, in part in the fact that immigration was handled bureaucratically rather than politically — Australia has had no version of Tammany Hall, nor needed one.

But it seems possible to me that the 1980s and 1990s will produce various kinds of 'ethnic politics' as the established and confident immigrant communities explore through politics the ways in which they may look after their own members. One area will almost certainly be education. For a long time it was assumed that all immigrants would want to learn English, and that their children would learn it anyway. Since the goal was integration, the schools made little provision for migrant children who were fluent in Greek, for example, but halting in English. After 35 years it is clear that integration was never likely to succeed, and

it has been abandoned as a goal. But the multicultural alternative does require a different pattern of schooling. Almost certainly the change will be slow in coming, and that slowness will create political tension, as parents proud of their children's performance in other areas rebel against a school system which judges ability in terms of English comprehension. My own guess is that ethnic politics will be a major aspect of the next 20 years; if it is, then education will be an important part of it.

Politics as Education

It is anomalous that 18-year-olds are required to vote but the school system (save in Victoria and the ACT, to a degree) regards political education as none of its business. The explanation is a historical one. First, for half a century at least politics was inextricably connected with sectarianism. Since all persons of goodwill did their best not to bring up the sectarian issue, it followed that one could not teach politics in schools; until the 1950s, it hardly existed as a discipline taught in universities. Perhaps, too, it was felt that political education was properly the business of parents (though I doubt that many thought this way). Second, since most children left school by the age of 15, and voting began at 21, it could be argued that politics was something children would have sufficient experience of by the time they needed to cast a vote.

Today's situation, however, is quite different. Sectarianism is much less a problem than it was before the war, and the gap between school and voting has shrunk to nothing for many students. Yet in most parts of Australia the schools make no effort to provide education in politics. The typical pattern is of some institutional basics in primary school (the Queen, parliament, the federal system, and so on), and then nothing thereafter. It is not easy to make politics a teaching subject, for ideology constantly gets in the way; but that is no reason for avoiding it. At the moment, the forces opposed to the teaching of politics in high schools are much stronger than those seeking its introduction. But that may change and, if it does, politics as education will become an issue. As the case in Queensland referred to above demonstrated, it will certainly be a hot one.

Continuing Education

Many universities are now admitting substantial proportions of their students at ages other than straight from high school, and the proportion seems likely to grow rather than decline. It may be that the 18-year-old will finally become the atypical university student and, if that does happen, it ought to produce a rethinking of the pattern of university life, the structure of the university year, and so on. Since universities are almost as conservative in their ways as parliaments or courts, I am not expecting anything revolutionary. Yet, if considerable unemployment and underemployment are to be with us for years to come, while the two- or three-career working life is to become common, then the role of schools, col-

leges, and universities ought to change too, to allow people to drop back into formal education for a time. Such changes will most probably be resisted by those presently staffing these institutions.

Portable Superannuation

I still have hopes that in my own lifetime someone will devise a system of portable superannuation that will permit teachers to move in and out of the educational system while they gain experience in public and private employment elsewhere. Since I thought we were on the verge of this ten years ago, I am beginning to doubt that it will ever come to pass. If it does, there could be considerable benefits to the education system, quite apart from the benefits to the individuals who comprise it. These will be familiar, and need no rehashing here. My own hope would be to see a quickening of the process of change within educational institutions, which seems abysmally slow.

* * *

If there is a disjointedness about this paper, it is because I am not confident about predicting the future. A political scientist can hardly avoid low-level predictions — who will win the next election, what will happen at the Labor Party conference, who will succeed the Prime Minister — but he is often wrong about those relatively easy problems. How much more difficult to forecast accurately the direction that the major institutions of politics and society will take? Yet my basic prediction is clear enough: Australia is an orderly society characterized by well-established institutions of considerable age, and these institutions will continue to dominate our decision-making processes. Moreover, it is probably the case that most Australians are more or less content with things as they are. They may be dissatisfied with the way that certain issues are handled, they may suspect that there is too much self-interest in important decisions by governments, and not enough public interest, but they accept the institutional framework of the nation as given: it is the people occupying command positions within it that need changing or controlling. If that is the case, then the impetus for change is quite weak, and the case for regarding the present institutions as of continuing importance is very strong.

Education had a marvellous run after the second world war. It was seen as a coming thing, like civil aviation or television. When its run finished, about 1975, it was consuming one dollar in every six of public expenditure, while teachers of all kinds made up 5 per cent of the entire workforce and taught 3 million school pupils, 150 000 university students and 140 000 college students — nearly a quarter of the whole population. It was a remarkable run, but it would have been unreasonable to want to see it go on for ever. The question for the future is whether the enterprise can be maintained in an efficient and responsible way when the enthusiasm and confidence generated by the expansion has departed.

3

Australian Society in Change: A Demographic and Economic Perspective

Sir Bruce Williams

The Australian population was about 300 000 (mostly Aboriginals) in 1788. By 1978 it had increased by 14 million. Just under two-thirds of that growth came from natural increase, and one-third from immigration.

The rates of natural increase have fluctuated considerably, and net migration rates even more. The position in this century is shown in Table 1. Changes in reproduction rates and in migration rates make it difficult to predict future population even for relatively short periods ahead. For an assumed 50 000 net migration a year, the First Report of the National Population Inquiry published in 1975 forecast a population of 17.6 million in 2001, whereas the Australian Bureau of Statistics (ABS) projection published only three years later put the forecast almost 3 per cent higher. Doubtless the population projection for 2001 will change several times before the end of this century.

The annual rate of growth due to natural increase has been falling since 1961, but future rates of growth are expected to fluctuate as in earlier periods. The present expectation is that growth from natural increase will rise in the five years from 1981. The annual rate of growth due to net migration has fluctuated between 0.07 per cent for the ten years to 1941 to 0.88 per cent in the five years to 1956. Net immigration fluctuates with immigration policy, with the rate of economic growth in Australia relative to the country of the immigrants and to the other countries that accept migrants, and with employment prospects. Net immigration is unlikely to be as stable as assumed in the projections to the end of the century given in Table 1.

Changes in population play an important part in changing society. The size of the population influences the extent to which potential economies of scale in production can be exploited to raise the level of output per head and so to influence hours of work and participation rates in educa-

Table 1 Population and Components of Growth

Period	Population at end of period '000	Average annual rate of growth		
		Natural increase %	Net migration %	Total %
Ten years ended 30 June				
1911	4 489.5	1.55	0.16	1.71
1921	5 455.1	1.62	0.35	1.97
1931	6 526.5	1.33	0.48	1.81
1941	7 109.9	0.79	0.07	0.86
1951	8 421.8	1.24	0.47	1.71
Five years ended 30 June				
1956	9 425.6	1.40	0.88	2.28
1961	10 548.3	1.43	0.77	2.20
1966	11 599.5	1.26	0.66	1.92
1971	12 937.2	1.16	0.76	1.92
Year ended 30 June				
1973	13 380.4	1.10	0.43	1.54
1974	13 599.1	1.00	0.62	1.64
1975	13 771.4	0.92	0.33	1.27
1976	13 915.5	0.88	0.15	1.05
1977	14 074.1	0.83	0.31	1.14
1978	14 248.6	0.84	0.40	1.24
	Projected population			
Three years ended 30 June				
1981	14 720.3	0.73	0.36	1.09
Five years ended 30 June				
1986	15 595.6	0.83	0.33	1.16
1991	16 487.8	0.80	0.31	1.12
1996	17 347.4	0.72	0.30	1.02
2001	18 141.3	0.61	0.28	0.90

Source: Year Book Australia.

tion. The rate of growth of population influences the age distribution of the population and the balance between the use of resources for capital expenditure and consumption. Changes in population through migration programs can change the balance of skills in the population over relatively short periods (which is the main reason for selective assisted–migration programs), while the sources of migration — whether the United Kingdom, North Europe, South Europe, the Middle East, or Asia — may influence life styles in a significant way.

The age distribution of the population influences the nature of output and economic growth. During periods of high reproduction rates, a relatively high proportion of the population will be at school and a relatively low proportion in the labour force. A drop in reproduction rates will for a time tend to increase labour-force participation rates and then later to increase the ratio of pensioners.

Table 2 Age Distribution of the Population

	Percentage of the population		
1954	28.5	63.2	8.3
1961	30.2	61.3	8.5
1971	28.8	62.9	8.4
(1981)	25.0	65.4	9.6
(1991)	23.3	66.2	10.5
(2001)	23.2	66.4	10.4

Recent changes in the age distribution of population, together with projected changes to the year 2001, are shown in Table 2. In recent years, the proportion of the population in the years to the end of compulsory schooling has fallen and is expected to fall further. The 'economically active' proportion of the population has risen and is expected to rise further.

Part of the 'economically active' age groups is engaged in full-time education and there is a strong secular tendency for that part to rise with growth in output per head. Between 1967 and 1977, retention rates to final year of secondary schooling rose from 22.7 per cent to 35.3 per cent. In the fifties and sixties, as the combined effect of population growth on the age distribution of the population and of economic growth on participation rates in full-time education, the number of students grew faster than the labour force. This was the major factor in the greater growth of expenditure on education than the growth in the gross national product (GNP). But in the seventies and eighties, as the combined effect of a slower population growth and a slower rate of economic growth, the GNP is likely to grow faster than expenditure on education.

The prospective movements in population and the labour force are shown in Table 3. The labour force is that part of the population in or seeking full- or part-time employment. The main determinant is the number in the 'economically active' age groups, but it is also influenced by social factors that influence participation rates. In recent years, for example, the participation rate of married women has increased considerably and has checked what would otherwise have been a reduction in the labour force participation rate.

Table 3 Average Annual Percentage Growth Rates on Population and Labour Force

Five years to 30 June	Population	Labour force
1961	2.3	1.9
1966	1.9	2.8
1971	1.9	1.9
1976	1.8	2.6
(1981)	(1.1)	(2.0)

One indication of the extent of the effect of changing population trends can be judged from a comparison of Professor Karmel's Fink Memorial Lecture in 1961 on 'The Arithmetic of Education' and my Fink Memorial Lecture on 'The New Arithmetic of Education' 18 years later.

Professor Karmel analysed demographic and other influences on expenditure from 1949–65 and showed that the causes of the increase in expenditure on education from 1.7 to 4 per cent of the GNP were, in descending order, demographic, participatory, and standards of provision. In that period, the size of the education age groups grew by 37 per cent more than the size of the working population, education participation rates grew by 28 per cent, and the standards of provision by less than 20 per cent. On the basis of projections of population, economic growth, and participation rates, he forecast a further rise in expenditure as a percentage of GNP, from 4 per cent in 1965 to 5 per cent in 1975. His forecast of a further rise in expenditure as a percentage of GNP was proved correct, though he underestimated the extent of the rise.

In my Fink Memorial Lecture last year, I showed that the growth in expenditure on education from 3.6 per cent of gross domestic product (GDP) in 1962 to 6.5 per cent in 1976 was due not at all to the demographic factor — the education age groups did not increase quite as much as the labour force — but to the rise in the education participation rate by over 50 per cent and the increase in the standards of provision by 25 per cent. On the basis of the projected increases in population (Table 1) and an assumption of a lower rate of economic growth, and therefore a lower rate of increase in participation rates, I forecast a reduction in expenditure *as a percentage of GDP* from 6.5 per cent in 1976 to 5.6 per cent at the end of the century. The major factor in that calculation was the projected increase in the labour force by 60 per cent between 1972 and the end of the century, compared with an increase of only 16 per cent in the education age groups.

A Diversion

To avoid misunderstanding, I emphasize that a projected fall in expenditure as a percentage of GDP does not necessarily imply a projected reduction in expenditure. The Committee of Inquiry into Education and Training also expressed projected expenditure on post-secondary education (for different rates of growth of the gross domestic product) as percentages of GDP, and in its second projection (Table 3.9 of the Report) the expenditure on post-secondary education was projected to fall from 1.84 per cent of GDP in 1977 to 1.68 per cent in 2001 for a 1 per cent annual growth in the productivity of the labour force, to 1.61 per cent for a 2 per cent growth rate, and to 1.56 per cent for a 3 per cent growth rate. That fall was widely interpreted to mean that the Committee had projected — or recommended — a reduction in expenditure on post-sec-

Table 4 Projections of Expenditure on Post-secondary Education ($ million at constant prices)

	Labour productivity growth					
	1%	*	2%	*	3%	*
1977	1586	(1.84)	1586	(1.84)	1586	(1.84)
1981	1869	(1.93)	1929	(1.91)	1988	(1.90)
1991	2240	(1.83)	2516	(1.79)	2826	(1.75)
2001	2517	(1.68)	3083	(1.61)	3764	(1.50)

* The numbers in the brackets are expenditures expressed as a percentage of GDP in that year.

ondary education. It did nothing of the sort. GDP in constant prices would rise from $86 346 million in 1977 to $150 840 million in 2001 for an annual growth in labour productivity of 1 per cent, and to $240 000 million for a 3 per cent growth rate. The Committee's projected expenditures on post-secondary education are shown in Table 4.

Fluctuations

In Table 1, the projected rates of growth due to natural increase and net migration are considerably more stable than the actual rates of growth in the years 1911 to 1978. This is not because the rates of growth are expected to become more stable, but because the projections are based on a few assumptions about 'trend' rates of change. Projections based on a realistic number of variables would produce a confusing number of projections.

Table 2 shows the age distribution of the population from 1954–71, and projections to the year 2001 at ten-year intervals. This, too, gives a rather misleading appearance of stability in the trends, with the 0–14 group going steadily down after 1961 and the 15–64 and the 65-and-over groups going steadily up. For some purposes, such projections are very useful; for others, it is important to use shorter intervals and different age groups. For example, the projected numbers of primary school enrolments given in the Report of the Australian Education Council Working Party on the supply and demand for teachers are about 10 per cent larger in the year 2000 than in 1980, but, within that period, there is a projected dip in numbers by 20 per cent between 1980 and 1986, followed by a rise of almost 25 per cent after 1986. The projected numbers of secondary students are also about 10 per cent greater in 2000 than in 1980, but, within that period, there is a rise by 1985 to the projected level of 2000, followed by a fall of almost 15 per cent between 1985 and 1992 followed by a recovery to the 1985 level in the next eight years.

Fluctuations of that kind set considerable problems for the education authorities. However the recent sharp revisions of the expected demand for newly trained teachers were due more to the rising labour-force par-

Table 5 Secondary School Grade Retention Rates[a] Australia: 1967 to 1977

		1967	1971	1972	1973	1974	1975	1976	1977	1978	1979
Year 12[b]											
All schools	Boys	26.5	34.1	35.7	35.2	34.1	34.6	34.6	34.0	33.1	32.4
	Girls	18.7	26.9	28.9	30.8	31.6	33.6	35.3	36.6	37.3	37.2
	All pupils	22.7	30.6	32.4	33.1	32.9	34.1	34.9	35.3	35.1	34.7
Year 11											
All schools	Boys	39.5	49.1	50.7	49.9	48.2	50.7	51.4	50.3	51.1	50.4
	Girls	32.5	42.7	45.5	46.9	47.1	50.3	52.6	54.4	55.8	55.8
	All pupils	36.1	46.0	48.2	48.4	47.7	50.5	52.0	52.3	53.4	53.0
Year 10[b]											
All schools	Boys	72.8	81.9	83.8	82.5	82.0	84.8	86.5	87.1	88.3	88.5
	Girls	69.3	79.7	81.6	81.6	82.2	85.1	86.7	88.3	89.5	90.4
	All pupils	71.1	80.8	82.7	82.1	82.1	84.9	86.6	87.7	88.8	89.4

[a] The retention rate is defined as the ratio of the number of pupils in the grade to the number of pupils who commence the first secondary grade when that cohort would have commenced their secondary schooling.

[b] Both Year 10 and Year 12 were planned as terminating stages of secondary education for different types of students.

Source: Commonwealth Department of Education.

ticipation rates of married women and to the effect of the recession in increasing the retention rates of teachers than to demographic movements.

Beyond the years of compulsory schooling, the projections of numbers depend on assumptions about retention rates in schools and participation rates in post-secondary education. By comparison with North America and Japan, Australian retention rates are low. Perhaps with this in mind, the Commonwealth Department of Education in its submission to the Committee of Inquiry into Education and Training projected an increase in the retention rates to Year 12 from 35 per cent in 1977 to 50 per cent by the end of the century. If, as has been the recent experience, 50–60 per cent of such students proceeded to universities and colleges, there would be an increase in tertiary enrolments substantially greater than the 50 per cent provided in the Committee of Inquiry's 'second projection' of numbers. Recent changes in secondary grade retention rates are given in Table 5. In recent years, the retention rates to Year 12 have fallen back a little for males but have continued to rise for females.

In the First Report of the National Population Inquiry, there are two projections of higher secondary school enrolments, assuming 50 000 annual net immigration. In one projection, based on the continuance of 1973 participation rates, the number of enrolments increases from 391 364 in 1971 to 474 209 in 2001. In the other projection, participation rates are increased to 'the maximum increase to be expected'. This raises the number of enrolments to 623 061 by 2001.

The basis for an assumed increase in paticipation rates of almost one-third was not discussed in the Report. There are three broad approaches that have been used to formulate 'plausible' projections of participation rates. One is to treat changes in participation rates as a function of the commitment of governments to equality and educational opportunity. Another is to treat changes in participation rates as a reflection of 'manpower needs' as reflected in relative incomes. This is the dominant approach used in *Australia at The Crossroads,* by Kasper, Blandy, Freebairn, Hocking, and O'Neill (1980), and is implied by those who stress the productivity of 'investment in man' in their advocacy of further expenditure in education. Another approach is to treat changes in participation rates as a reflection of changes in real incomes. The Report of the Committee of Inquiry into Education and Training emphasized this aspect of growth in education. Whereas Kasper and colleagues concluded that the demand for educated manpower will not rise relative to the labour force, and that therefore participation rates will not increase much in the absence of strong government action to induce such an increase, the Committee of Inquiry concluded that, by and large, participation rates rise with the growth in labour productivity and GNP per head, and that such a rise would be an important aspect of society's adjustment to changing technology.

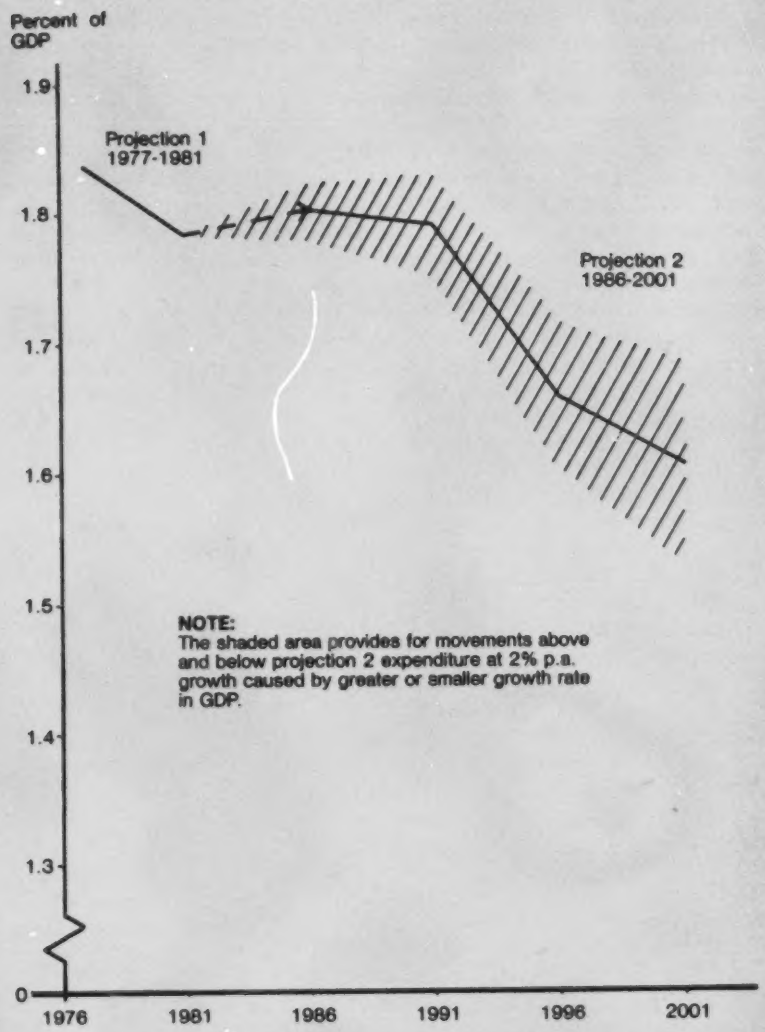


Chart 1 Cost of Projection 1 (1977 to 1981) and Projection 2 (1986 to 2001) as a Percentage of GDP with Assumed 2% p.a. Increase in Output per Unit of the Labour Force

The Committee of Inquiry into Education and Training reached a provisional conclusion that an increase in labour productivity of 2 per cent a year would be associated with a rise in the number of post-secondary students by something like 50 per cent between 1977 and 2001, and in expenditure by over 90 per cent (given the rise in real salaries and the labour-intensive nature of education) but that, for a labour productivity growth of only 1 per cent a year, the number of students would grow by something like 25 per cent and expenditure by about 33 per cent. In the first case, expenditure would fall down 1.84 to 1.61 per cent of GDP; in the second case from 1.84 to 1.41 per cent. The type of relationship that the Committee had in mind is indicated in Chart 1 (which is a reproduction of Chart 3.5 in the Report of the Committee of Inquiry). The issues involved will be discussed later in this paper after a discussion of the effect of economic growth on the structure of employment.

Economic Growth

The GDP is the market value of goods and services produced in Australia as measured by the Australian Bureau of Statistics. Before the second world war, the term GDP (GNP) had a very restricted currency. It is now widely used: the Budget Statement presented by the Treasurer contains an estimate of the percentage growth of GDP in the year just passed and a forecast for the current year; the United Nations calculates the percentage of GNP that it expects developed countries to give as aid to less developed countries, expenditure on education and on research and development is frequently expressed as a percentage of GNP, and evidence that the calculated percentages are less than in other countries is frequently regarded as sufficient evidence of underspending. When in April 1980 the Minister for National Development and Energy responded to a question in Parliament with the statement that the Australian Government expenditure on energy R & D as a percentage of GDP in 1979 was only 0.033 — compared with 0.038 in New Zealand, 0.062 in Canada, 0.1 in the United Kingdom, 0.137 in West Germany and 0.177 in the United States of America — it is likely that most members of Parliament who heard the statement or read it in Hansard concluded that the Australian Government should spend more.

Care should be taken in making such comparisons to consider other differences between countries; also to avoid assuming, without regard to the circumstances, that increases in GNP are necessarily good, and that large increases are better than small increases. Malcolm Muggeridge once wrote of the American gross national mind growing along with the gross national product. It was a comment both witty and salutory.

In the period since the second world war until 1975, growth in output per head in the developed countries was much higher and more sustained than ever before. The growth in GDP in Australia was very high by

Table 6 Employed Persons

	1972 %	1974 %	1976 %	1978 %
Agriculture	7.3	6.4	6.0	5.8
Manufacturing	24.1	23.6	21.6	20.6
Construction	8.6	9.2	8.7	8.1
Wholesale and retail	20.4	20.1	19.5	20.4
Transport	5.4	5.3	5.6	5.3
Finance, insurance	7.2	7.5	7.8	7.9
Community service	11.3	12.4	14.2	15.1
Entertainment, recreation	5.9	6.0	6.5	6.2
Other[a]	9.7	9.6	10.1	10.6

[a] 'Other' includes mining; gas, electricity, and water; communication; public administration; and defence.

Australian standards, but it was below the growth rate in Western Europe and Japan. Whereas between 1950 and 1978 Sweden and Switzerland increased their incomes per head from $3000 by a factor of more than three, France from $2100 by a factor of four, West Germany from $1500 by a factor of more than six, and Japan from $550 by a factor of over 14 to a level above that in Australia, income per head in Australia grew from about $3000 by a factor of 2.5. The Australian growth was a little greater than in the United Kingdom where income per head grew from $2300 by a factor of 2.25, and in the United States where income per head grew from $5000 by a factor of just under two.

Economic growth leads to changes in the distribution of the labour force — at first away from primary to secondary industry and then away from both primary and secondary industries to tertiary activities. At the end of the second world war about 19 per cent of the labour force was in agriculture and mining, 27 per cent in manufactures and 54 per cent in utilities, construction, and services. The percentages are now about 7, 21, and 72 respectively. The changes since 1972 are given in more detail in Table 6.

The main changes are the reductions in agriculture and manufactures which together fell from 31.4 to 26.4 per cent, and the rise in community services from 11.3 to 15.1 per cent. Community services consist of health, education, library, etc.; welfare and religious institutions; and other community services.

Occupational Structure

Indexes of the civilian labour force and occupational employment are graphed in Chart 2. This chart brings out clearly the impact of the reces-

sion on employment in manufacturing and construction. An end to the recession might not take employment in these two categories back to the levels of 1974, but it might bring a substantial increase in employment in manufacturing (as happened in the economic recovery of the late thirties). If this happened, the percentages employed in manufacturing in 1976, 1978, and 1980 would appear as 'below trend'.

Changes in the distribution of the labour force by industries are accompanied by changes in the distribution of the labour force by occupation. The changes since 1964 are shown in Table 7. The main reductions in percentages were farmers (by one-third) and tradesmen and production workers (by one-eighth). The main increases were clerical (by one-fifth) and professional and technical (by one-third).

Brave Forecasts

In *Australia at the Crossroads,* Kasper and others (1980) make some forecasts of further economic growth and changes in the industrial distribution of the labour force for two different sets of policies. Under what they describe as a Mercantilist set of policies, they forecast annual growth of 2.5 per cent for GDP, 0.8 per cent for population and 1.7 per cent for GDP per head; for what they describe as a Libertarian set of policies, they forecast annual growth of 4.9 per cent for GDP, 1.1 per cent for population and 3.8 per cent for GDP per head.

Their estimates of the differences in the industrial distribution of the labour force that would follow from the adoption of Mercantilist and Libertarian policies are given in Table 8. The main differences are in the private sector, which is dominant in manufacturing, and in the public sector, which is dominant in public administration, community services, and entertainment.

Their descriptions of policies as 'Mercantilist' or 'Libertarian' need some explanation. The term Mercantilist was popularized by Adam Smith in his book on *The Nature and Causes of the Wealth of Nations.* Mercantilism was not a clear and consistent set of doctrines or system of political economy, and economic historians have disagreed sharply on the essence of Mercantilist doctrines. But common to all representatives of Mercantilist thought was a fear of a shortage of money and a surplus of goods, and hence an emphasis on the importance of a state strong enough to break down the many medieval barriers to commercial expansion, to protect the interests of traders, and to encourage exports.

Adam Smith criticized the network of bounties and restraints, and a complex of trade treaties designed to ensure a favourable balance of trade and the import of precious metals. But he also made a more general attack on the role of governments, corporations, and monopolies: 'The capricious ambition of kings and ministers had not during the preceding

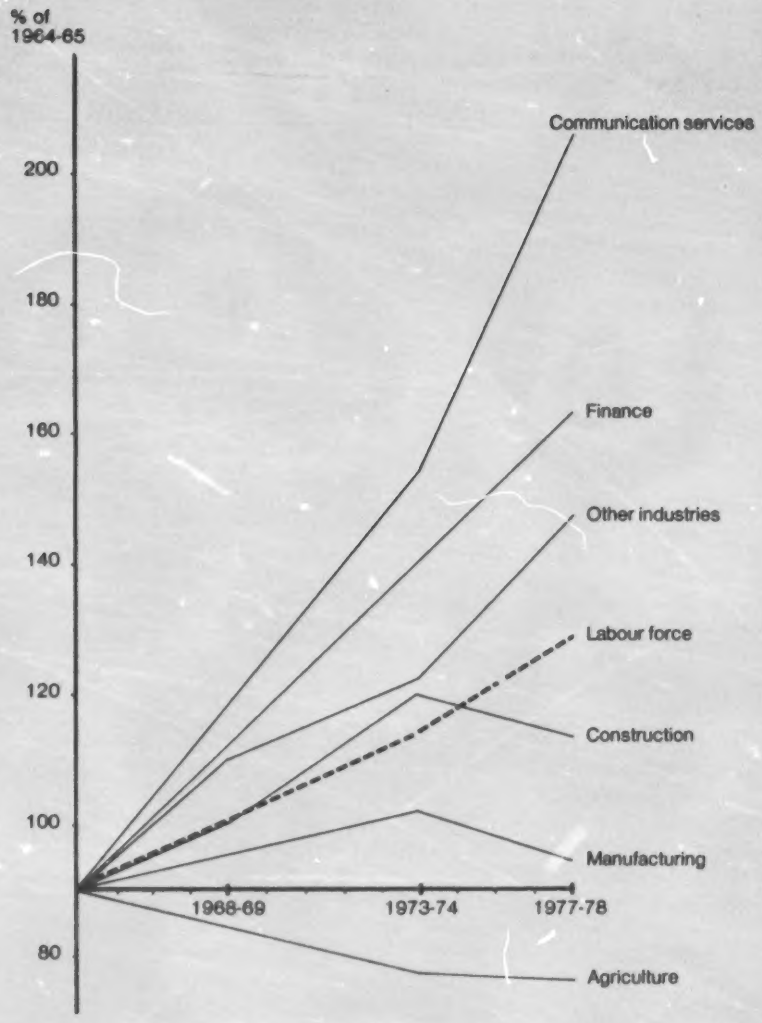
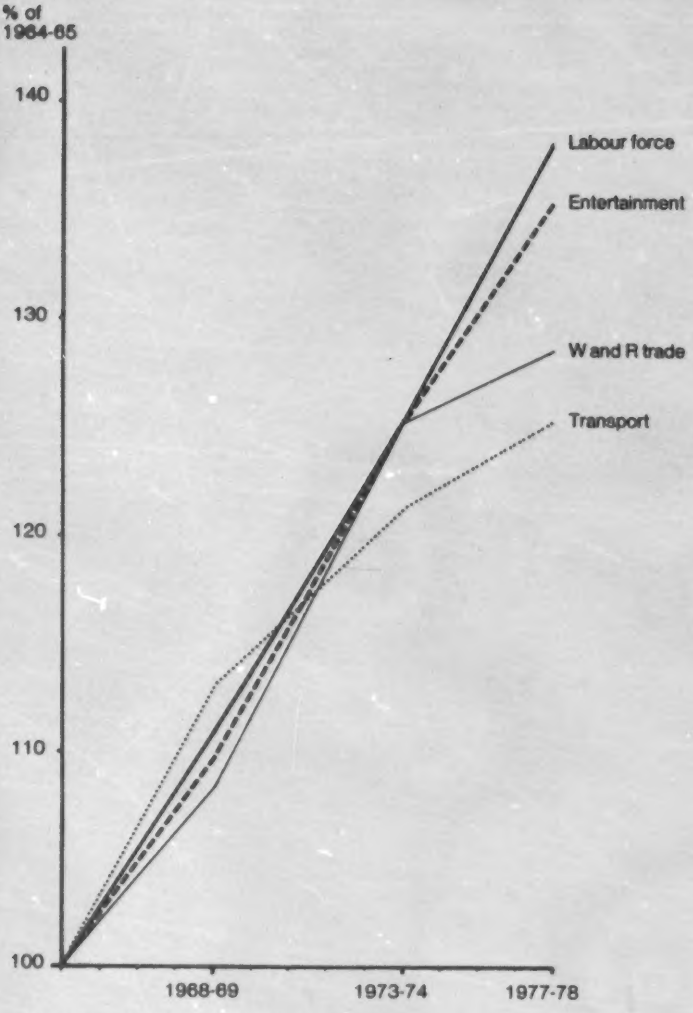


Chart 2 Indexes of the Civilian Labour Force and Industry Employment since 1964–65 (1964–65 = 100)



Source: Commonwealth Department of Industry and Commerce, Bureau of Industry Economics. *Employment of Demographic Groups in Australian Industry.*

Table 7 Labour Force by Occupation

May	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Professional, technical, etc.	9.5	9.6	10.0	10.2	10.6	10.5	10.7	10.8	11.0	11.5	11.8	11.8	12.2	13.0	12.8
Administrative, executive and managerial	6.9	7.2	7.3	6.4	6.2	6.2	6.3	6.4	6.3	6.2	6.2	6.0	5.9	5.7	6.0
Clerical	13.9	14.2	14.4	15.2	15.4	15.3	16.6	16.3	16.1	16.3	17.1	17.2	17.1	17.2	16.7
Sales	8.0	7.8	8.2	8.1	8.2	8.0	8.1	8.3	8.6	8.6	8.5	8.3	8.7	8.8	8.8
Farmers, etc.	10.4	10.2	9.8	9.4	9.1	8.6	8.5	8.2	8.2	7.6	7.2	7.2	6.8	6.9	6.8
Miners, etc.	0.7	0.7	0.6	0.6	0.7	0.8	0.7	0.7	0.6	0.6	0.5	0.6	0.6	0.6	0.6
Transport and communication	6.3	6.2	6.1	6.2	6.2	6.1	5.9	6.0	6.2	6.0	5.9	5.9	5.8	5.7	5.3
Tradesmen, production- process, workers and Labourers n.e.c.[a]	35.9	35.9	35.5	35.4	35.1	35.2	34.5	34.4	34.2	34.2	33.6	33.2	32.8	31.9	31.5
Service, sport and recreation	8.1	8.1	8.0	8.4	8.3	8.6	8.5	8.7	8.5	8.8	8.9	9.5	9.7	9.6	9.4
Looking for first job	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.4	0.6	2.0

[a] not elsewhere classified.

Source: Australian Bureau of Statistics, *The Labour Force*, Cat. 6204.0.

Table 8 'Kasper's' Industrial Distribution

	1973	2000	
	%	Mercantilist %	Libertarian %
Agriculture, forestry and fishing	6.9	7	6
Mining and quarrying	1.7	3	5
Manufacturing	24.1	19	24
Construction and utilities	10.3	11	11
Trade, transport, and finance	34.6	32	34
Public administration, community services and entertainment	22.4	28	20
	100	100	100
Total employment	5.8m	7.2m	8.6m
GDP per head ($)	3 420	5 390	9 530

century been more fatal to the repose of Europe than the impertinent jealousy of merchants and manufacturers', and he argued that once all systems of preference or of restraint were abolished 'the obvious and simple system of natural liberty' would establish itself. Each man in following his own interests would be led as by a hidden hand to promote the general good and, apart from maintaining national security, law and order, and certain public works and institutions to meet, in effect, social not individual needs, the sovereign would be

> discharged from a duty, in the attempting to perform which, he must always be exposed to innumerable delusions, and for the proper performance of which no human wisdom or knowledge could ever be sufficient: the duty of superintending the industry of private people, and of directing it towards the employments most suitable to the interest of the society.

Adam Smith's simple doctrine of beneficial natural liberty was later changed into a doctrine of beneficial competition. The essence of that doctrine is that there is a continuing competitive pressure to make innovations and so to generate growth in output per head, for competition acts to reduce prices and profits, and this gives firms an incentive to make process or product innovations to restore profits. But because in a competitive system other firms can copy the successful innovations and new firms can enter the industry, the profits of innovations will be whittled away. There is therefore a continuing interest in innovation and a continuing pressure for economic growth.

The reference to the Mercantilist and Libertarian policies is to be

Table 9 Educational Attainment and Age 1973–74 (%): Full-time Workers

Educational attainment	Age group (years)					
	15–24	25–34	35–44	45–54	55 and over	Total
With post-school qualifications:						
Degree	2.0	6.6	4.9	3.2	3.0	4.1
Non-degree tertiary	2.2	6.1	6.5	5.3	4.9	5.0
Technical level	4.7	7.5	6.7	6.1	4.5	6.1
Trade level	10.2	17.3	16.2	15.2	10.9	14.3
Other[a]	4.7	4.1	4.0	4.5	2.8	4.1
	23.8	41.6	38.3	34.3	26.1	33.6
Without post-school qualifications:						
Matriculation	6.2	5.1	2.7	3.0	2.3	4.0
Left school at:						
17 or over	13.6	7.2	4.1	4.5	3.9	7.0
16	24.1	11.5	9.5	8.0	8.0	12.6
14 or 15	31.2	29.7	34.7	38.7	47.5	35.2
13 or under	1.1	5.0	10.7	11.5	12.2	7.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

[a] Some qualifications could not be classified to any of the levels shown. Most of these relate to short specialized courses in such fields as typewriting and shorthand, farm book-keeping, dressmaking and automotive maintenance.

Source: Australian Bureau of Statistics, Income Distribution, Cat. 6502.0.

understood in these terms. By Mercantilist, Kasper and his associates mean a policy of extending the government role in society and, in particular, extending the social services and restricting import competition, capital flows, and competitive pressures to generate new technologies. By Libertarian, they mean the reduction of the government role other than to provide basic income maintenance schemes and an encouragement of competition.

The Kasper calculations are included to facilitate discussion of the impact of different forms and rates of economic growth. They cover two of a larger number of possible outcomes.

Education and Employment

In the last 30 years, the Australian labour force has become more highly educated (Table 9). This increase in educational attainment is a consequence of two forces — manpower needs and social demand. New technologies and research and development designed to make or facilitate further innovations create the manpower needs. The increase in social demand results from government decisions to increase financial support for education in the interests of manpower needs and equality of oppor-

tunity, and from the decisions of parents, as they become more affluent, to provide for longer periods of education for their children. The result of the increase in social demand for education is that a part of the increased demand for the more highly educated is not a consequence of a 'manpower need' for more highly educated workers, but a consequence of a growing shortage of intelligent and energetic young people who have not had a more extensive education.

There are great differences in the qualifications of the labour force in the various types of employment. This is shown in Table 10.

Seventy-two per cent of those employed had no formal qualifications. The highest percentages were 91 in agriculture, 71 in manufactures, and 57 in construction. Fourteen per cent of the employed had trade level qualifications, and the highest percentages were 38 in construction and 21 in manufacturing. Four per cent had reached the technician level of qualifications, and the percentage exceeded 10 in community services and communication. Just over 2 per cent had reached a degree qualification, one-third of 1 per cent a higher degree, and just over 4 per cent had other tertiary qualifications. The total with tertiary qualifications was 7 per cent. Categories with the highest employment of those with tertiary qualifications were community services with 33 per cent, finance and business services 12 per cent, and public administration and defence 11 per cent. Those with the lowest percentages were the transport group at 1.1 and the agriculture group at 1.5.

Economic growth affects the demand for particular skills. A decline in the relative importance of manufactures and construction, where 55 per cent of qualified tradesmen are employed, would reduce the relative importance of trade training in manpower plans. A decline in community services, in which 50 per cent of those with first degrees and 64 per cent of those with higher degrees are employed, would have a considerable impact on the relative importance of degree studies in plans based purely on manpower needs. Changes in population trends have already had an impact on the relative importance of community services and the demand for teachers.

The nature and influence of the social demand for education on the supply of educational qualifications makes it impossible to forecast the manpower demand for particular skills implied in projections of economic growth and the occupation distribution of employment. Kasper and his colleagues have, however, made projections of the requirements for educated manpower from the assumption that there is 'a fixed qualifications structure within occupational categories' which they presented as a reasonable procedure provided there is an acceptable occupational grading structure of qualifications. They then took the 1971 structure as a reasonable bench mark. Their forecasts of requirements for educated manpower are given in Table 11.

The differences between the forecast percentages in the Mercantilist

Table 10 Industry by Highest Level of Qualification Obtained: Employed Population, 15 Years of Age and Over, Australia, Census 30 June 1971

Industry (Division)	No qualification	Trade level	Technician level	Other tertiary	First degree	Higher degree	Total
Agriculture, forestry, fishing, etc.	353 032	12 343	11 969	3 701	1 779	215	386 407
Mining	53 289	12 874	2 730	1 930	2 608	633	76 023
Manufacturing	863 324	258 508	35 846	21 657	12 083	1 527	1 215 618
Electricity, gas and water	53 754	24 566	4 725	3 960	2 229	206	91 252
Construction	235 068	154 593	9 570	5 229	3 154	287	412 229
Whole and retail trade	770 862	138 690	26 102	20 499	6 883	696	988 088
Transport and storage	221 645	28 049	9 237	2 962	1 234	127	271 713
Communication	87 542	7 107	12 903	1 491	1 221	72	103 485
Finance, business services, etc.	270 755	13 667	14 992	25 356	16 146	1 374	363 418
Public administration, defence	194 827	28 574	19 138	14 978	14 523	1 359	283 152
Community services	263 115	26 671	67 864	111 893	63 040	12 549	564 649
Entertainment, recreation, etc.	214 184	33 150	7 306	4 149	1 602	197	267 511
Other and not stated	184 918	20 207	3 880	3 308	1 710	304	216 883
Total employed	3 757 315	758 999	226 262	221 113	128 212	19 546	5 240 428

Source: Australian Bureau of Statistics.

and Libertarian outcomes are small. This result is a consequence of the assumption that there is a fixed qualifications structure within occupational categories. The 'requirement' for qualified manpower would be considerably greater for the Libertarian outcome — about 25 per cent for those with tertiary qualifications and technicians, and 22 per cent for tradesmen — because the labour force would be almost 20 per cent larger.

Under both outcomes, the Kasper calculations imply a considerably smaller requirement for both tertiary and trade qualifications than the present capacity to supply. Since the forecast degree of excess supply would be greater for those with tertiary qualifications, Kasper and his colleagues predict a compression of differentials between graduate and non-graduate earnings. This forecast reduction in differentials is not surprising — there have been distinct signs of such a trend for some time now. The proportion of graduates in the labour force has been rising and on present trends the proportion will increase by a factor of 3 between 1971 and 2001.

Relative incomes by age and educational attainment are shown in Table 12. This pattern of incomes is the result of a process of adjustment to various economic and social forces.

In recent years, the increase in the 'social demand' for education and the provision of additional capacity to meet that demand has been greater than the increase in the manpower needs for tertiary qualifications. The effect of this has been to increase the range of jobs in which graduates are employed and to compress the differentials between graduate and non-graduate average earnings, and it is reasonable to expect a further compression.

The manpower needs approach to educated manpower used by Kasper and his associates deals with only one part of the problem of adjustments to economic growth. It is necessary to consider also the role of 'manpower absorption' which is a consequence of the way in which communities adjust to increases in real incomes.

Life Hours of Work

Innovations in processes of production and in products make possible economic growth and lead to changes in the industrial and occupational distribution of labour. Innovations in methods of producing food and in public health measures have made possible great increases in world population. At the end of the eighteenth century, Malthus wrote that, because population tended to increase in geometrical progression but food supplies in only arithmetical progression, there were strict limits to the growth of population. When he wrote, world population was less than 1000 million. Population is now five times greater and is still growing.

New technologies in agriculture, industry, and commerce have increased the number of jobs by a factor of five or six as the result of this increase in capacity to support a large population. The output of goods

Table 11 Requirements for Educated Manpower: 'Kasper's' Forecasts

Highest qualification	1973	2000	
	%	Mercantilist %	Libertarian %
Higher degree	0.4	0.5	0.5
First degree	2.8	3.3	3.5
Other tertiary	4.7	5.6	5.9
Technician	4.5	5.0	5.2
Trade	14.7	14.3	14.6
No formal qualification	70.4	68.6	67.9
Other	2.5	2.7	2.4
Total	100.0	100.0	100.0

Table 12 Relative Incomes by Age and Educational Attainment: Percentage of Mean Income[a] to Total Mean Income of Full-year, Full-time Workers, 1973–74

Educational attainment	Age group (years)					
	15–24	25–34	35–44	45–54	55-and-over	Total
With post-school qualifications:						
Degree	104.5	168.8	205.3	222.1	213.2	183.7
Non-degree tertiary	88.4	128.7	155.4	147.7	144.9	138.0
Technician level	76.9	117.9	134.9	139.9	117.6	119.4
Trade level	90.1	109.2	110.7	109.1	99.2	105.7
Other[b]	64.5	103.9	102.6	129.6	107.3	100.0
Without post-school qualifications:						
Matriculation, n.e.i[c]	76.3	120.0	128.9	133.4	118.9	108.7
Left school at:						
17 or over	69.1	103.7	115.3	105.8	111.0	91.4
16	63.0	95.6	100.5	115.3	105.2	86.4
14 or 15	61.7	91.6	93.1	95.2	93.5	87.4
13 or under	72.7	81.9	85.8	88.7	90.6	86.8

[a] Total income from all sources. Includes persons whose earned income for 1973–74 was nil or who made a loss.

[b] Short specialized courses such as typewriting and dressmaking.

[c] not elsewhere included.

Source: Australian Bureau of Statistics, *Income Distribution*, Cat. 6502.0.

and services has increased more than the population, so making possible an overall increase in production per head. This increase has been concentrated in the developed economies. Production per head is many times greater in North America, Japan, and Western Europe than it is in, for example, Egypt, India, and Pakistan.

The increase in material standards of living in developed countries has checked the growth of population in those countries via changes in attitudes to material standards of living ('a Baby Austin instead of a baby' as it was put in the thirties) and induced innovations in birth control. When the capacity to produce is increased, individuals in the community decide in effect how to divide that increase in the capacity to produce between additional incomes, improved conditions in the work place, and smaller hours of work through the year.

One hundred years ago, hours of work per week were about 55. In 1900, the *standard* working week was set at 48 hours and in 1948 at 40 hours. The standard working week is now 38. Standard hours have been reduced by about 20 per cent this century. Weeks per year have also been reduced by increases in annual holidays. An increase from two weeks to four weeks reduces hours per year by 4 per cent.

Suppose that in 1900 the average person entered the labour market at 14, left at 70, and worked 48 hours a week for 50 weeks. His life hours of work would then be 134 000. Suppose next that, in 1980, average hours of full-time workers are 38 and weeks per year 48. His life hours of work would be 102 144, or approximately one-quarter less than in 1900. That roughly was the position for male workers.

There is another response to higher incomes that affect life hours of work. Parents are able to finance their children through a longer process of education. The average age of entry to the labour market is now about 19. As compared with the estimated average age of 14 in 1900, this has the effect of reducing years in the labour market from the 56 assumed in the previous example to 51. On this account, life hours of work would fall from the originally calculated 134 000 in 1900 to 93 024 in 1980, 31 per cent less than in 1900.

Economic growth has also increased the capacity of individuals to provide for old age and the willingness of employers to contribute to income-related schemes. This has had a small effect on the average age of retirement of males up to 1970, but a stronger effect in the last 10 years. The overall effect — subject to an important qualification relating to married women — has been to reduce life hours of work by about one-third in the last 80 years.

Social Changes

In recent years, there has been a major change in the labour force participation rates of married women which has offset an otherwise substantial fall in average years in the labour force. This reflects a major change in

Table 13 The Relationship between Indexes of Employment and Hours (i)

1 Year	2 Production capacity	3 Demand for goods	4 Demand for labour at 1980 hours (column 3 & column 2)	5 Index of full employment hours (per annum)
1980	100	100	100	100
1990	120	115	95.8	95.8
2000	140	130	92.9	92.9
2010	160	145	90.6	90.6

attitudes, to which war-time labour organization, higher education-participation rates, labour-saving equipment, and safer methods of birth control have contributed. In the Census of 1947, the participation rate of married women in the labour force was 8 per cent. By the 1971 Census, it had risen to 33 per cent. Thus, although the participation rate of unmarried women fell from 68 to 61 per cent in that period, the overall participation rate of women rose from 25 per cent in 1947 to 37 per cent in the 1971 Census. The labour force participation rate of married women, given in the ABS publication *The Labour Force Australia 1978*, was 29 per cent in August 1966 and 42 per cent in August 1978. Although the participation rate of males fell from 84 to 78 per cent in that period, that of the whole population rose from 60 to 61 per cent.

A substantial proportion of married women are part-time workers, however, and the effect of the change in the participation rates of married women in checking the reduction of average years in the labour force was therefore limited. In 1966, the aggregate hours worked per week was 188.7 million of which married women contributed 24.3 million or 12.9 per cent. By 1978, aggregate hours worked per week was 218.3 million and the contribution of married women had only risen to 39.0 million (17.8 per cent). This had a considerable effect on average hours worked. While those worked by men only fell from 41.3 to 40.1, those worked by females fell from 34.1 to 30.2 and the overall average from 39.1 to 36.6.

Hours and Employment

A change in life hours of work is part of the process of adjustment to new technologies. A few simplified arithmetical examples may help to make this clear. Suppose that the capacity to produce with the current labour force and annual hours increases as in column 2 of Table 13, but that the demand for goods increases as in column 3 (that is, increases by only three-quarters of the increase in column 2). The demand for labour at current hours is given in column 4 and the index of hours required for full-employment given in column 5.

Table 14 The Relationship between Indexes of Employment and Hours (ii)

1 Year	2 Production capacity	3 Demand for goods	4 Demand for labour at 1980 hours (column 3 & column 2)	5 Index of full employment hours (per annum)
1980	100	100	100	100
1990	120	110	91.7	91.7
2000	140	120	88.6	88.6
2010	160	130	81.3	81.3

Annual hours could be reduced by adding to annual holidays or the age of entry to the labour force, or by reducing weekly hours or the age of retirement, or by some combination.

The relation between movements in column 2 and column 3 will be affected by the balance between process and product innovations. If new product innovations are dominant, column 3 is likely to grow by almost as much as 2, and vice versa. Suppose that for the next 30 years, process innovations are dominant. Column 3 may then increase at, say, only half the rate of column 2. Hours would then need to fall further, as in Table 14, to maintain employment.

I do not know, nor does anyone know, how much innovation there will be in the next 20 or 30 years or what the balance between product and process innovation will be. But in these highly simplified examples (where the labour force does not increase), if the adjustment in hours took place only through a reduction in weekly hours, the reduction by the end of the century would be from, say, 36.6 to 33 in the first case, and from 36.6 to 30 in the second case. In neither case would the change be very difficult to accommodate in a 30-year period.

The balance between product and process innovations is not stable. There have been periods of rapid economic growth — from the 1780s to the end of the Napoleonic Wars, from 1840 to the end of the seventies, from the end of the nineteenth century to the first world war, and from the end of the second world war to the early seventies — when product innovations have been dominant. In the in-between periods of slower growth and higher unemployment rates, labour-saving process innovations have been more dominant. We appear to be in such a period at the moment.

In all past in-between periods, there were strong fears and frequent predictions of technological unemployment, as there are at present. Labour-saving innovations are an important aspect of technical change and always create some problems of adjustment. Even when product innovations and other growth factors sustain the demand for labour, the

new jobs may require different skills or be in different places. But the problems of adjustment to labour-saving innovations are easy to manage, and the incentives to occupational and locational mobility are greatest, when the demand for labour is strong.

It should not be assumed that the main cause of current unemployment is technological. Other factors have contributed. For example, a contributing factor to the high unemployment of young females is the sudden reduction in the proportion of females who leave the labour force after marriage. Other trends in participation rates have also contributed to a rise in youth unemployment. Between 1961 and 1966, persons aged 15–24 contributed one-third of the increase in the labour force. After 1966, the strong trend to later entry to the labour market reduced the entry of the 15–24 group to the labour market. But the tailing off in the growth of retention rates in schools after 1972 and in the growth of participation rates in higher education later in the seventies brought a big increase in new entrants to the labour market. From 1965 to 1970, the number aged 15–24 leaving full-time education each year averaged 175 000. From 1971 to 1976, the average rose to 223 000 and increased subsequently to 260 000.

The sharp increase in the price of oil and the widespread failure to maintain a reasonable balance between money flows and goods flows also contributed to unemployment. In Australia, the sharp increases in wages and salaries which forced up real unit labour costs by 10 per cent between mid-1974 and mid-1976 contributed to the sharp increase in unemployment. (The unemployment rate for the 15–19 group rose by a factor of 3.7 from 4.7 per cent in 1974 to 17.4 per cent in 1979, for the 20–24 group a factor of 3.6 from 2.3 per cent to 8.2 per cent, and for the 25-and-over group by a factor of 2.7 from 1.3 per cent to 3.5 per cent.)

That unemployment has not fallen with the subsequent reduction of that 'wage overhang' (as the Treasury referred to the sharp rise in unit labour costs in its evidence to the Arbitration Commission) is a sign of the complexity of the problem. The official and unofficial economic advisers to the main political parties disagree as to appropriate economic policies in current conditions. Some argue that it is necessary to bring inflation under control as a condition of restoring full employment; others that inflation is a world-wide phenomenon, that policies of fiscal and monetary restraint in Australia will not reduce inflation but only economic growth and employment, and that increases in government expenditure and monetary targets would reduce unemployment and even perhaps reduce inflation through a sufficient growth in output.

The long post-war boom encouraged expectations of substantial annual increases in money and real wages and salaries. But to the extent that the rate of economic growth falls, the rate of increase in money wages and salaries consistent with similar increases in real wages and salaries must fall also. Although the expectation of rising standards is now less strong than

it was, as judged from the movement in household savings ratios, the pressures for annual wage and salary increases in excess of current increases in output per head are still very strong.

It is sometimes argued that strong trade union pressure to increase money wages will bring about a redistribution of income in favour of labour and that this should be supported on social grounds. The room for such a redistribution without a cramping effect on the generation of new jobs is, however, very limited unless the output/capital ratio is rising. Suppose that output is 100 and capital employed 300. If gross profit is 10 per cent of capital employed, wages and salaries will receive 70 per cent of output and owners of capital 30 per cent. If, from the same capital, output is raised to 120, 'labour's share' can rise to 75 per cent of output without any fall in gross profits as a percentage of capital employed. In the United States from 1919–57, gross profits as a percentage of capital employed rose, but there was such an increase in output per unit capital that the share of labour of all kinds rose from 72 per cent to 80 per cent. Such an outcome may result from capital-saving innovations or from more efficient management. In some situations, more efficient management arrangements that would increase output from given capital, and create the possibility of an increase in labour's share without a cramping effect on the generation of new jobs, may be dependent on productivity deals with unions to end traditional practices or trades demarcations that restrict output.

The extent and nature of future inventions and innovations in products and processes is unknowable. We cannot know what the balance between labour-displacing and labour-creating innovations will be, nor just what the demand for established and newly-required labour skills will be. Given the extent of research and development activities and the current productiveness of research and development in generating new technologies, it is reasonable to count on further increases in output per head in this century and therefore on further reductions in hours of work. To the extent that labour-displacing innovations outweigh labour-creating innovations, the economic problems involved in reducing hours without adding to inflation will be the greater, and so too the economic and social problems involved in establishing an equitable distribution of the opportunities for work.

It is reasonable also to expect considerable changes in the division of labour and in the nature of work tasks, to expect an increase in the demand for some existing labour skills and a reduction in demand for others, and to expect a demand for new skills as well as a demand for higher skills in some established specialisms. This should have implications for our policies on education and training. The Committee of Inquiry on Education and Training proposed a National Centre for Technical and Further Education to analyse the nature of work tasks and to establish appropriate modular programs for training and retraining. Although

for that recommendation the Committee concentrated on the problems of shortages and surpluses in the many fields of skilled tradesmen, that type of approach has a much more general application. Because of our current (and likely future) inability to predict manpower requirements, there is a need to make much greater provision for retraining and continuing education, and to establish our basic approaches to education and training on the assumption that further education and training will be needed after entry to the workforce.

Assessment of the prospects of youth employment presents special problems. If in the next 10 or 20 years there is a tendency for the job-displacing forces in technology to outweigh the job-creating forces to such an extent that the secular employment problem cannot be easily managed by a reduction in hours per year and years in the labour force, the youth unemployment percentage is likely to remain high, for industrial laws and practices bias labour market prospects against new entrants to the labour market.

Youth employment was declining before the increase in the youth unemployment percentage in the seventies and the sharp increase after 1974. That was the combined effect of demography and higher school retention rates. Whereas in the mid-sixties those aged 15–19 were about 14.5 per cent of the labour force, by the end of the seventies they were about 12.5 per cent, and whereas in the mid-sixties workers aged 15–19 were just over 14.5 per cent of those employed full-time, by the end of the seventies workers aged 15–19 were less than 10.5 per cent of those employed full-time. By contrast, of those employed part-time, the 15–19 group rose from 8.5 per cent in the mid-sixties to about 14 per cent at the end of the seventies.

Despite the recent fall in retention rates to Year 12 on the part of males and the tapering off of the increase for females, I expect a further secular rise in retention rates as part of the response to further economic growth and smaller life hours of work. The trend in the percentage unemployment of the smaller numbers of youth in the labour force will then depend on the movement of several quite unpredictable forces — trends in technology, the nature of transitional education programs, the age-taper in wages, and the extent of discrimination against new entrants to the labour force.

Policy on Technology

To impede technical change would not cure our current levels of unemployment over 6.5 per cent, and about three times that level for teenagers, or raise the incomes of those living in poverty. New technologies are needed to create employment in new products, and process innovations to maintain our competitive position. We cannot insulate ourselves against overseas influences and, if the introduction and generation

of new technologies in Australia are not encouraged, we will place ourselves at a competitive disadvantage in international trade. That would necessarily retard the growth of output and employment.

Economic growth depends on change. Change is required to extend employment. Most gain, but some suffer in the process. Recently the executive of the ACTU recommended measures to protect or compensate workers threatened or affected by technical change. In appraising these proposals, it is important to keep in mind those now unemployed and those about to enter the labour force as well as those whose employment, or unemployment in its present form or place, is threatened.

The ACTU recommended basic severance pay of four weeks for each year of employment with additional compensation for older workers, the retention of older workers in employment unless satisfactory arrangements are made for the payment of superannuation or pension benefits, the provision of portability (or cash payments) for long-service leave, pension, and other accrued rights, the compensation by employers for capital loss on homes, for lost time, fares, and removal expenses where workers have to take work in other localities, six months notice of retirement, and arrangements for the retraining of workers.

Under this scheme the cost of compensation for workers displaced from their existing activities — even where other employment is available — would be carried directly by the innovating employer. The scheme would raise the cost of innovation. It would, therefore, impede growth and, in effect, discriminate against new entrants to the labour force. Youth unemployment at four times the mature adult rate and young adult unemployment at twice the mature adult rate are already very serious problems, and we should be looking for schemes that will help them and not handicap them further.

There is a very good case for income-related unemployment benefits but not as financed by a tax on particular kinds of innovation. There are many causes of unemployment, and redundancy in some forms will be caused by innovations in other industries in other countries. The ACTU proposal for compensation would be arbitrary in its incidence and incapable of achieving its ostensible aim. The proposals for the portability of rights to long-service leave and pensions, for the integration by employers of their manpower and technical plans to minimize the disruptions of technical change, and for the retraining of workers are, however, important parts of policies designed to encourage growth in output and employment.

In elaborating a positive policy on growth in output and employment, the conditions that encourage innovations provide a useful starting point.

The first condition is to ensure an ample supply of opportunities. This is provided by our own research and development and by the very much larger research and development programs overseas which we can tap into by making licensing and know-how agreements, by allowing subsidi-

aries of innovating foreign companies to operate here, and by importing machines or machine tools or devices that embody new technologies.

The second condition is to ensure a capacity to identify and to use the opportunities for innovation. That requires the employment of scientists and engineers in general management, production, and marketing as well as in research, it requires adequate supplies of technicians and tradesmen with the relevant skills and an education system capable of responding quickly to the need for new skills, and it requires risk capital and special arrangements to finance small firms eager to exploit promising inventions.

The third condition is to ensure pressures to innovate. This is the traditional function of competition, and employers frequently band together to restrain trade and to protect themselves against the rigours of competition, or to persuade governments to do so. A *sustained* policy of high tariffs, import quotas, and protection for restrictive practices reduces pressures to innovate and impedes growth in output and employment.

A positive policy on growth in output and employment must be part of general economic policy, and include sound monetary and fiscal policies. In the seventies, unsound fiscal policies placed an excessive burden of adjustment on monetary policy and, as a consequence, monetary authorities were faced with a cruel choice between restraining inflation in the interests of growth and stability, and financing high rates of inflation to prevent a further rise in immediate unemployment.

Failures in fiscal policy were due to failures on the part of governments to appreciate the consequences of using inflation to finance their programs (or a reckless disregard of those consequences) and to a failure of unions, professional associations, and statutory authorities with power to make awards to appreciate the consequences of increasing salaries and wages at a faster rate than the rate of increase in output per worker. That 10 per cent increase in real unit labour cost between mid-1974 and 1976 was a reflection of an increase in salaries and wages far in excess of increases in output per person employed. It was contrary to the interests of the community in full employment.

Summary

1 Average annual rates of growth of population vary considerably. The growth due to natural increases varies, and sometimes unpredictably even in short periods. Growth due to net migration is even less predictable. On the basis of certain assumptions about birth and death rates, the ABS has projected an increase in population to 16.6 million by the year 2000, assuming no net migration, and to 18 million, assuming net immigration of 50 000 a year.

2 The projections based on a 50 000 annual net immigration indicate a reduction in the 0–14 age group from 26 per cent of the population in 1978 to 23 per cent in 2001, in the 15–19 group from 9 per cent to 7

per cent, and the 20–24 group from 8 per cent to 7 per cent. By contrast, the 65-and-over group is projected from 9 per cent to 10.5 per cent. This indicates a distinct aging of the population, though there would for the period be an increase in the 20–64 age group from which the bulk of the labour force is drawn from 56 per cent to 59 per cent.

3 This shift in the age structure will make for a trend increase in expenditure on pensions relative to education. The increase in the labour force relative to the main education age groups, 5–19, will create a strong tendency to reduce expenditure on education as a percentage of GNP.

4 There is a link between levels of income per head and participation rates. Unless education becomes significantly less labour intensive and/or participation rates less inclined to growth with increases in income per head, expenditure on education will be a higher percentage of GNP at higher than at lower growth rates.

5 Trends in population indicate that there is now a considerable excess capacity to produce teachers and that, at current pupil-teacher ratios, the demand for new primary and secondary teachers will fluctuate significantly. The problem will be least for high levels of net immigration, for mobility of teachers between primary and secondary schools, and for a preponderance of end-on rather than integrated teacher education courses.

6 New technologies are a major factor in economic growth. When the capacity to produce food and to sustain growing populations is taken into account, new technologies have been responsible for a very great increase in the number of jobs. For a given population, new technologies both create and eliminate jobs. They create jobs by making possible new products or by so reducing the cost or improving the quality of old products that there is a great extension of demand. They eliminate jobs by labour-saving innovations that are not offset by a sufficient increase in the demand for the product following a reduction in the real cost or an increase in quality. For a given population, the net reduction in the demand for labour at a given level of hours depends on the balance between product and process innovation and on the extent to which the community decides to use its increased production potential to extend its material wealth.

7 There has been a secular tendency to take out one-third to one-quarter of the increased productivity in the form of a reduction in life hours of work. Life hours are cut down by reducing weekly hours and the age of retirement and by increasing annual holidays and the age of entry to the labour force. Life hours have fallen by 25–30 per cent since 1900 and, because the invention of new technologies will not cease, are likely to fall further.

8 The occupational distribution of the labour force changes with tech-

nology. Because we do not know at all precisely what technology and occupational distribution will be even 10 and 20 years ahead, it is not possible to predict the precise labour skills that will be needed. Sensible manpower planning has to be based on a careful monitoring of trends, on the provision of basic education and training programs that facilitate relatively short retraining programs, and on a recognition that what is often called 'credentialism' is a reflection of an increase in education participation rates (and later ages of entry to the labour force) that are a consequence of economic growth.

9 Present signs are that the rate of growth in labour productivity will be less than it was in the fifties and sixties. The extent of growth will depend on what is happening in other countries and on the realization that factors other than technology create unemployment, that the trend in average life hours of work will be down, that failure to adjust labour and employment practices will increase unemployment particularly among the young and add to inequality, and that modern forms of Luddism will impede growth and the adjustments in social arrangements that would enable the community as a whole to derive most benefit from new technologies.

4

Changing Educational Emphases for the 1980s

Jean Blackburn

What changes should be made in the content and structures of Australian education to acknowledge and, more importantly, to interact with social changes which have occurred and which seem likely to affect us in the coming period? No attack on this question is likely to meet with universal acceptance. The selection of significant changes in the society is itself controversial. What is involved for education is even more so, since it must express positions about the kind of society we want to be, about the role of education in that society, and about the nature of education itself. It must also contend with the powerful interests involved in present structures.

There is no necessary connection between any social change and an appropriate educational response, the response itself being open to evaluation from many, and often conflicting, positions. This may be illustrated by an example. When in the nineteenth century the new class of English industrialists, brought into existence by the industrial revolution, sent their sons to private schools, they thereby had them inducted into an aristocratic value system centring around service and the tradition of the cultivated amateur. This did consolidate a new elite continuous with the previous aristocratic one and provide rulers for a far-flung empire. In the process, however, it also taught that elite to despise learning which had practical application in trade or commerce, and so contributed to Britain's loss of industrial supremacy to Germany. What was appropriate in terms of a status response and in terms of imperial glory was totally inappropriate from another perspective. It was so, not just in economic terms, but also in terms of the democratic changes taking place in the society at the political level.

The educational response in Australia to two major social changes — migration from non-English-speaking countries and the changing social role of women — has been both slow and confused. This reflects a less

than wholehearted acknowledgment of the significance of the changes. It also, however, reflects community divisions about what kind of response might be appropriate, and theoretical confusion on both fronts. We may conclude from these two examples both that education systems are slow to change in response to social changes and that there is no unambiguous path connecting such changes with educational responses.

The separation of longer-term social changes from economic trends and from changed political orientations is hazardous. We have only to look at the speed with which public concern for the underprivileged is presently being translated into blaming the victims, at the pressures to put women back into old moulds, and at present calls for restrictive educational approaches, to appreciate how closely the more humane and liberal attitudes of the recent past had their basis in unprecedented (and probably non-repeatable) economic expansion. My underlying fear is that the eighties are likely to see educational changes which reflect increasing 'privatization'. As such, they are likely to exacerbate many of the social problems we now face, or to drive them underground in a perspective which turns them into personal inadequacies. They are likely to be shortsighted and partial responses to immediate economic situations when broader visions are called for. Within them, special attention to the underprivileged is more likely to be motivated by social protection than by any desire for greater equality of condition or more broadly defused understandings.

Fears, however, are negative guides. There is some obligation to say what might be better directions than those which one believes are likely to eventuate. I begin from the assumption that, over the eighties and probably beyond them, holistic changes in Australian society, which would rule out a high degree of continuity with past and present structures, are unlikely to eventuate. The steady one-dimensional alliances of interests and belief which would be necessary to bring about major upsets to that structural continuity are not present, and their emergence seems unlikely. Skirmishes on many fronts rather than final conflicts or plausible appeals to common interests are likely to characterize our future, as our past. Those skirmishes, however, are likely to cut deeper and to be more bitterly fought than any of the recent past, and alienation from the basic structures of the society is likely to extend with unrealized hopes, particularly among young people, whether it takes the form of apathy and opting out, or finds more active expression in destructiveness or in social action.

I cannot pretend to have a neat map of desirable changes in Australian education. My main argument is that it should become more demonstrably serviceable to wider sections of the population and become more conscious of its social responsibilities, as distinct from being seen so strongly as the path to individual social and economic advancement. I can do no more than indicate some major problem areas as I see them, and suggest

directions of movement where I feel able to do so. We simply do not know clearly how to advance on a number of fronts, and the best way to find out is not to lay out blueprints, solidifying more impermeable structures with their inbuilt professional claims, but to move experimentally within feasible options having stated purposes, testing the water as we go. This humility may be the beginning of wisdom.

Legitimating the Operation

A central social change which all educational changes will need to take into account is the new relationship which has emerged between the educational system and the polity. The Australian public, and more especially politicians of every hue, are no longer willing to accept the role of putting educational funds on the stump and running. Both the scale of funding and its directions are likely to be further affected by this development, and calls for greater efficiency in demonstrating results are likely to become more insistent.

There is disillusionment with the whole educational enterprise, in which so many illusions have been invested. From a social point of view, it is now widely perceived that a credentials escalation which displaces the less well-educated from the jobs they have been accustomed to occupy, replacing them with better educated applicants without changing the nature of the job itself, has little to recommend it. It is an expensive way of giving some applicants preference over others in job queues, and it acts strongly to the advantage of particular social groups. At the other end of the spectrum, it is now revealed that a school system so strongly directed towards selection for tertiary entrance is less serviceable than it might be for all students at the stage of life at which they experience it, and that it fails to take seriously enough the needs of those who move out of it at the end of its compulsory phase into the adult world. Attention has shifted strongly from the social mobility aspects of the education system, now perceived in any case to have had many of the characteristics of a convenient myth, to more fundamental questions about what the whole expensive operation is for.

Educators rightly contest the narrow instrumental answers being given to that question in the form of 'functional skills' and knowledge and skills directly usable in jobs. They are, for the first time, seriously faced with an obligation to enter into dialogue about the justification of educational activities on defensive terms to which they are unaccustomed. The debates within the education sector — many of them barely intelligible to the initiated — about what, if anything, is important for everyone to be able to understand and do and about the societal value of liberal studies at post-school level convey little more than a shared uncertainty. Few of the obtusely justified positions connect with practice at all, in the sense of giving indications of what they involve doing, if accepted. This situation is symptomatic of a good deal of what is wrong with the education system as

a whole, reflecting as it does the notion that theory and analysis on the one hand, and action on the other, exist in two separate non-interacting worlds.

How do we handle this disillusionment? In the first place, we should not accept at face value much of what is being said. Falling student numbers may be a pretext for reduced expenditure on schools, for example; they are not a justification for it. The public sector in Australia is not especially large or taxation especially high in comparison with countries of similar wealth. Although educational expenditure has risen steeply over recent years, the base to which that rate of expansion is related was particularly low. Australia is still by no means at the top of the league in the proportion of its gross national product (GNP) spent on education. More importantly, Australian participation rates in education remain comparatively low above compulsory ages. Nearly half the age group is out of school by age 16 in Australia. In Japan, 76 per cent of the 15 to 19 age group is still in full-time education; in the USA 72 per cent, in Norway 63 per cent, in France 51 per cent — in Australia 46 per cent. Belgium, which has the same per capita income as Australia, has 61 per cent of 15- to 19-year-olds in full-time education. These facts need to be kept in the forefront of discussion when claims are made that the Australian population is over-educated and educational expenditure is too high.

In justifying the nature of the activities which take place within schools, and also to some degree within higher non-directly vocational education, professional educators now have to accept that they do not occupy the position of unchallenged pre-eminence they once did. This makes it all the more important that they get their position clearer in the debates and dialogues which will define a newly negotiated consensus with governments and local communities. They can no longer talk about knowledge and understandings in terms of their intrinsic value, since it is now clear that such arguments have in fact operated as a means of justifying social hierarchies. Their new justifications must in some way relate knowledge more directly to action and practical activities, as well as to reflection and the pursuit of truth. What needs to be sought at school level is a selection of knowledge, activities, and experience useful in understanding and negotiating the world and in extending the range of potentially satisfying activities to which people have access in it. Such a selection will not be identical in all places. It will draw on accumulated knowledge and generalizable understandings, relating them to differing experiences, expectations, and realities, and seeking routes to them through practical activities and experiences as well as through more secondhand means.

Some such interpretation of their responsibilities is likely to lead the most serious teachers over the eighties away from both standardized prescriptions and from some open smorgasbord of student choice. What will be common is a commitment to building the intellectual and social

resources which students take from school to support their efforts to negotiate their world more powerfully. Working this commitment through in practice will be difficult, since the seas are not well chartered, but in many places it is already taking some coherent shape. It will attempt to cope on the one hand with the fact that, in an unequal and diverse society, the worlds which students grow up in and inhabit as adults are not identical, and on the other, to avoid locking people into localized mental ghettos, to unexamined experience and expectations. This has wide implications, running across social class, ethnicity, sex, and location, and for the manner as well as the substance of schooling.

To give some concreteness to the type of commitment on the basis of which professionals at school level now need more widely to act, and on the basis of which their dialogue with parents and governments should be conducted, I have chosen examples from three actual schools. The first is a primary school in an industrial area in which a pre-school exists as part of the junior primary section. Much of the adult population consists of lone mothers, confined at home by young children and low earning power. A condition of enrolment in the pre-school is that mothers have active contact with it, many of them participating in discussion of what will be done there and in executing it. The junior primary school thus has many mothers who already know most of the children. They have developed a confidence which enables them both to participate with staff in policy discussions and to organize classes of their own, with TAFE support. The confidence and articulateness of the junior primary children was seen to be a problem, so special drama classes were introduced which have proved helpful in overcoming it. While the mothers believe strongly that how well their children learn to read, write, and calculate is important, and play an active part in assisting such competencies forward, they and the staff are also concerned that these young children learn to care for each other and to speak their minds confidently. The mothers express concern that their own schooling, while it did teach them to read, write, and calculate, also taught them to be dependent, silent, and unconfident. They thus have views about the interpretation of 'basic skills' which influence the curriculum, which they have voiced in wider educational debate.

The second school is a secondary one, also in an industrial area but in a larger city. Here school retention is low and both motivation and achievement in bookish tasks are also below average. The staff have organized the large school into sub-schools in order to give students a smaller more stable group of staff and of other students to relate to. Much of the curriculum, while being applied in emphasis, is nevertheless carefully structured around ideas and concepts central to 'the disciplines'. There is sustained attention to the development of oral and written communication and calculation, and to the development of independence and initiative. In a small community centre in the school, adults of a range of

ages conduct their own classes and activities and a team of volunteers regularly hears students read and discusses the content with them.

Work experience is integrated into the curriculum on the basis that it is not experience of itself which teaches, but reflection on it and the development and checking out of generalizations from it, with the aid of understandings drawn from the social and physical sciences. In the social sciences, teachers have an agreed structure for the curriculum which operates across the mini-schools, and incorporates exercises which are closely related to life tasks and involve going out into the community and using the raw material collected within a more broadly derived framework of ideas. Older students engage in carefully constructed analysis of original source material under the general theme, 'how people change the social world'.

The third school, also a secondary one, is in Tasmania. Here a class of Year 9 non-academic students, with their teachers, organized the total transaction of borrowing funds, and building, equipping, and selling a house, themselves contributing much of the labour. In the process, they covered the normal Year 9 curriculum, equipping them to enter Year 10, extended their formal skills and, at the same time, learnt confidently to negotiate the society and to take responsibility for something real in a co-operative way.

These examples may suggest that it is only in those areas, and among those students, where conventional approaches to learning have failed that changes are needed or likely to take place in the direction of relating theory to practice and to life in the world. It is certainly the case that it is in schools where old methods and presumptions are patently not working that the impulse to change is greatest, if not always responded to. The Disadvantaged Schools Program has often provided both a stimulus and support for self-examination and improvement in schools. As a strategy for school improvement, it may well have wider relevance. There is considerable evidence that the desire among school students for learning more directly related to the world and to understanding themselves and others is widespread. How this legitimate desire is responded to is a major curricular question for the eighties. If it is responded to as fragmented practical information and know-how, not situated within a framework of understanding with generalizable application, that may give us the worst of all worlds. Understanding the world, oneself, and others is, moreover, both a social and an intellectual activity. It cannot be seen as one *or* the other.

Piper's (1979) study of the teaching of social sciences in secondary schools is a timely warning that the curriculum as experienced by students may be very different from the perceptions teachers have about what is being taught and learnt. The official content is a less than adequate guide to what is received. Both teachers and students in the schools that Piper studied gave high priority to relevant knowledge, enquiry and

decision-making skills, personal development, social skills, and social values. Students, however, in a perception borne out by several other studies (Collins and Hughes, 1979) perceived knowledge content in traditional academic areas as being too strongly emphasized at the expense of the other priorities also acknowledged. Teaching styles, and the degree to which they advance the kinds of personal, social, and skills development which allow students to be independent generators of action and learning in school and life are clearly crucial.

Articulating a coherent new view of compulsory schooling is now the central practical task facing educators. That view will need to be democratic in presumption and related to societal features which go beyond social mobility. At higher educational levels, increasing numbers of adult participants will challenge old rationales about content and methods too, requiring professionals to articuiate both to clients and governments a defence of what has continuing significance within an openness to new perspectives. Who should participate in decisions about the content and manner of education at all levels, from those of general charter to face-to-face teaching, will be a major question of the eighties. Professionals need to be better prepared for their role in this situation than they yet are.

Basic Schooling

Over the eighties, we need to move to a new view of compulsory schooling, regarding it as a continuous basic phase in its own right, unassociated with selection for post-compulsory options. We should frankly accept that compulsory schooling is largely a substitute for the informal ways in which young people in pre-industrial societies located themselves in society and culture and came to understand and participate in adult activities. We should also regard it as a phase over which the achievement and personal development of all students needs to be such as will enable them confidently to move into the outside world and to take responsibility for their own continuing development, whether in the education system or beyond it.

Before there was any compulsory schooling, children took part in economic and domestic activity from an early age. They worked in agriculture and domestic industry and later in factories and mines and other unskilled occupations opened up by the industrial revolution. Compulsory schooling began as a substitute for the social control mechanisms and cultural induction previously provided by the stable and small communities destroyed by that revolution. It was also seen to be needed because improved technology had eliminated the kind of work young children were able to do and because of the increasing significance of theoretical knowledge, literacy, and numeracy in productive activity. It still serves those functions, but now within the kind of society where the frank indoctrination and stern control of the early years of compulsory

schooling are no longer either possible or functional in a world characterized by diversity of belief, by uncertainty and change rather than by stability.

If we want young people to be able to cope with the kind of society we now have, and with a future already in important respects unlike the recent past, we need to place more emphasis on the basic skills of resourcefulness, co-operativeness, problem solving, and independence, as well as those of literacy, numeracy, and calculation. This requires a rethinking of the whole basic phase. Once primary schooling was all that most people got. We have extended compulsion into the secondary phase, for most students into the tenth year of schooling, without fundamentally changing the orientation of the compulsory secondary years to accommodate this fact. This orientation has two aspects. The first is that ability of an academic kind displayed in bookish ways remains the only seriously valued kind of ability. The second is that the early secondary phase continues to be viewed as part of the selective process for higher academic studies. These two emphases permeate the whole school system, resulting in the expectation and acceptance of considerable levels of failure at every stage of it and negatively defining early leavers as people not talented in particular ways which represent a narrow selection from the activities valued in society as a whole.

We can no longer afford such a confined perspective. Without denigrating academic activity, from which the general ideas which give significance beyond the immediate must be derived, it is nevertheless necessary over the compulsory years to relate the understandings derived from academic disciplines more directly to their application in the world. Otherwise they appear to have no significance for those not interested in preparing for the professions or abilities lying in that direction. Nor do they necessarily contribute to the growth in maturity of those successful in them. It is also necessary to ensure at every stage that all students have skills and understandings necessary for subsequent phases. At some levels and in some tasks, mastery learning which allows more time to slower students and direct instructional methods may be appropriate. But they have limited application, since, over the long haul, unless students see literacy and numeracy within a context which makes them tools in activities in which they see some point, they will not engage with learning in ways which involve transformation of existing understandings, though they may participate notionally in a ritual.

There is clearly something seriously wrong with a school system in which apprentice plumbers learning to install and service air-conditioning in a twenty-storey building have learnt that they are not clever. A considerable proportion of the age group internalizes this message from their schooling — an incapacitating pay-off for ten years of compulsory attendance. A reassessment of basic schooling might usefully begin from this point.

There are, moreover, disturbing indications that low expectations among teachers are associated with beliefs they hold relating social background with limited capacity. The Martin and Meade (1979) study of secondary students in Sydney suggests, for example, that an important reason why students from non-English-speaking backgrounds were found to achieve as well as, or better than, native English speakers matched with them by socio-economic level was that the migrant students, backed by ambitious parents, rejected the expectations the schools associated with their migrant background. In the case of migrant students, we now accept that the school which does not acknowledge home culture and attempt to mediate in cultural conflicts between home and school may thereby contribute to any educational disadvantage associated with ethnicity. The same may well be true for working-class children who find few contacts between their common-sense knowledge and experience and the teaching they encounter, and who are also the object of low expectations. For similar reasons, many girls find in school little which helps them to a different and more powerful perception of themselves as females from that which they see represented in home, local community, and the media.

If basic schooling is seen as a unit in its own right, and the achievements of and confident capacity to negotiate the society of all students is to be taken more seriously, we should reassess the importance of positive discrimination which builds in extra support and encourages initiative in schools where a high proportion of students presently fail to gain the levels of formal skills and the understandings and capacities which are needed in order confidently to manage one's own life. After a relatively short attempt to make schooling more successful and serviceable to populations in areas where the resources of families to support children in schooling are relatively low, it became fashionable, especially among those emphasizing innate capacities, to pronounce the whole attempt futile. A recent reassessment of Headstart (Halsey, 1980), a form of pre-school intervention involving families and children in poor areas in the United States, gives a more hopeful picture. If we are concerned with broad competencies, regarding literacy and numeracy as an important sub-set of them, the Disadvantaged Schools Program in Australia is also, at its best, giving cause for optimism. We should invest more funds in such efforts, beginning at pre-school level, involving parents as active participants and seeking seriously what we have not yet found — the means of making schooling both more formally successful and more related to the exercise of power over circumstances among social groups presently gaining least from it. The conditions and contexts of educational environments more effective for learning need identification and dissemination.

On a broader front, the search for activities which can successfully turn more students on to learning would include the kind of developments

now beginning in some school systems. These involve the local design of options across a group of neighbouring schools and the part-time employment of people who have special skills but are not necessarily professional teachers. They may be artists in residence, teachers of particular musical instruments, camping and walking enthusiasts, good cooks, native speakers of a language, mechanics who can teach about engines, or people having odd-job skills.

In modern societies, most individuals have themselves to play an active part in building and sustaining the social networks which protect them from damaging isolation and bring broader satisfactions to individual lives. The school is now the major social institution where such competencies can be built and mutual support among people strengthened. Many of the most important decisions affecting individual lives are the result of social or collective decisions, not individual ones. Learning to appreciate that and to cope with the conflicts involved in making such decisions is vital. We should therefore take co-operative competence more seriously in schools as a means of assisting individuals to appreciate the strength which comes from associating with others in purposeful activity, as a means of learning how to build links with new people, and because the issues facing us as a society require commitment to more than self. Many people see such an emphasis on social competence as yet another task placed upon the schools. Nothing could be further from the truth. In the first place, learning to co-operate with others in learning and being committed to how well the whole group learns is a means of learning, not an additional task. In the second place, the association between social incompetence and formal learning failure is itself strong, and a poorly developed ability to build supportive structures is an important element in individual breakdown, with its personal and social costs.

Schooling and Work

One of the many reasons for regarding the present orientation of compulsory schooling as unsatisfactory is that it now seems likely that we need to encourage more students to stay in school longer. It would be attractive to adopt a simple recurrent education stance, allowing and encouraging more young people to move out of school early and return to study after a period of experience in the world had allowed them to work through what they wanted to do. Deferred entry into higher education by the young and increased enrolments among older people are already moving in an unplanned way towards spreading educational opportunities over a wider age span, rather than concentrating them so strongly on the young. Such developments, accelerated more strongly by public policy, have much to recommend them in terms of equity and adaptability and in terms of the service which education might perform in re-orienting both

the society and individual lives. The irony of the present situation, however, is that it is precisely the kinds of jobs which young people straight out of school might enter which are in particularly short supply.

There is, and always has been, the strongest association between school and work. That association, however, is indirect, mediated through credentials which are related to levels of individual placement. Extended careers counselling in the schools and the wide introduction of work experience, usually confined to the least academically able in the later years of compulsory schooling, attempt to bring paid work closer to the school. Their focus, however, is individual decision and placement. There is a remarkable absence in the whole school curriculum of the study of work as a major human activity. Students gain little assistance in understanding the effects of technological change, why different kinds of work command different rewards and are performed under different conditions, why some important work like child rearing is unpaid, what the role of trade unions is, how major investment decisions affecting the availability and nature of work are made. The individual emphasis of what is done precludes an understanding that unemployment is a socially produced phenomenon which cannot be tackled at an individual level. The likelihood of getting a job is presented as an individual competition.

I have recently had the opportunity of talking with considerable numbers of Year 10 and Year 11 students across the country, many of whom are about to leave school. Many early leavers are propelled more strongly by the desire to get out of school than by any positive plans about what they will do. Many of these students, I believe, are delivered blindfold into unemployment or into jobs in the secondary labour market which offer no advancement, in which work is precarious and non-developmental. It is a matter for considerable concern that they understand so little about the world of work and that they have so strongly imbibed the message that the only reason for knowing anything is to be able to get a better job as a consequence. The connection between school and work is destructively strong.

It seems likely that we have entered a new phase in which full-time employment will not be available to a considerable proportion of early school leavers irrespective of how well equipped for it they are. This phase has been recognized in countries like the United States which have much higher school retention rates than we do, and which provide post-compulsory education for a larger group. The number of full-time job openings in Australia has not been growing anything like the rate of growth in people seeking first jobs since 1974. Within an overall official unemployment rate of 6 per cent in 1979, some 17 per cent of 15- to 19-year-olds were unemployed nine months after leaving school, and the rate among the earliest leavers was above 27 per cent. The general level of economic activity clearly affects the situation, in that, when total demand for labour falls short for those offering for work, those seeking first entry

to jobs suffer most. There are long-term structural changes at work, however, which will continue to affect the situation even if reasonably high levels of growth in GNP are restored. The numbers of semi-skilled and unskilled jobs are continuing to fall with advances in technology, which are now affecting service industries as well as manufacturing in an unprecedented way. More women are wanting paid work, and wage differentials between adults and the young and inexperienced are not great enough to induce employers to take young people in for on-the-job training.

Karmel (1979) addressed these issues, in the Radford Memorial Lecture, in terms of options for youth. In that lecture, he pointed to the fact that shortage of jobs is likely to be a continuing problem. He drew attention to the falling proportion of males being retained in school to Year 12, to the falling demand for places in higher education from those straight out of school, and to the continuously rising numbers of full-time students in TAFE institutions. He emphasized the need to restructure public financial support for youth in ways which positively encouraged continued full-time study, part-time study, and part-time work whether combined with study or not. He suggested wider options within a public financial support structure. These options would, as in the Canadian Opportunities for Youth Program, include projects designed and operated by groups of young people themselves. They would cover small productive enterprises attached to educational institutions and community sponsored services and projects. Present patterns of financial support favour those unemployed in comparison with those from low income families continuing in education, and place conditions on unemployment relief which discourage both study and part-time work.

Karmel's analysis was particularly valuable in emphasizing the need for a coherent policy for youth, covering financial support and not confined to alternatives within the education system as traditionally conceived. Such an approach would be less firm in its public commitment than European moves towards a 'youth guarantee' which accept responsibility to find youth a place either in education and training or in work broadly conceived as purposeful activity accepted as valuable by the community, or in a combination of both. It moves towards such a guarantee, perhaps allowing young people more freedom to make their own choices than such a guarantee might involve.

These perspectives may be contrasted with the Transition from School to Work Program initiated by the Commonwealth Government and now being implemented in co-operation with the States. This Program is being implemented without any overall youth policy covering allowances and on the assumption that the inadequacies which result in high youth unemployment are those of young people themselves. The action being funded in schools is concerned with remedial teaching and with link courses in technical colleges for low achievers. Considerable sums are

also being spent on full-time pre-apprenticeship courses in TAFE institutions. Much of this action could be useful if it can be assumed that specific skills are likely to improve employment prospects, and that those skills should largely relate to manufacturing, which has been shedding 80 000 workers a year for some years now. The Program also seems to assume that a last-minute remedial emphasis can overcome the cumulative effects of ten years of school failure.

This brings us back to the significance of the whole orientation of compulsory schooling itself. Unless we place its whole span outside a selective mentality, regarding it as a common phase untied to subsequent options, dedicated to maximum success in the mastery of skills and understandings important for all, relate it more strongly to the full gamut of activities in the society, and see it as a substitute for informal inductions to it, I believe we are in long-term trouble. Schooling is to a degree a holding bay. The economy has progressively excluded the young, and it looks as though this trend has now entered a new phase. Young people themselves have not engineered this exclusion, so the schooling they are provided with should be as expansive and confidence building as possible, while also taking learning essential for self-definition in the society seriously.

Present thinking and policies are in one sense too obsessed with the unemployed, in a short-term way. They carefully avoid a rethinking of educational provision itself and concern for longer-term social developments. If a proportion of the age group is schooled in the expectation that they may be disgorged onto the labour market at age 15 or 16, whatever they know and can do and without protective understanding of the society, that is the whole society's loss, not just theirs. Solutions to overall employment decline can take two forms. We could have a permanent group of unemployed, remove the stigma from that, support them well and encourage them to like it, or we could learn how to share paid and unpaid activities around if everyone were competent to engage in both. While I do not believe we should educate individuals for unemployment, we should educate in ways which help all people to face unemployment as a social phenomenon and work out constructive alternative approaches to its existence. The school's concentration on individual benefits and individual choices inhibits the development of such constructive thinking. The fortunate are preserved in their smugness; the unfortunate are rendered impotent because they face a socially created situation individually.

Post-compulsory Structures

There is much resistance to the idea that the education system should play a significant role in attacking unemployment over the longer term. This resistance is legitimate to the degree that the responsibility for job creation lies elsewhere, and most Australians appear to believe strongly that there is no point in education except to get a job. Without pretending that longer schooling has any connection with job availability, we should

not, however, shrink away from the possibility that making schooling more attractive and satisfying to many who now leave it early would in the circumstances be a good thing to do. We should be more encouraging to those who, having tried their hand at finding a job, or having taken up a job to which they do not want to be committed in a long-term way, want to re-enter school. But we should also look seriously at post-compulsory structures which have something to offer a wider range of students.

These structures are now extraordinarily narrow. They offer either preparation for tertiary entrance or early commitment to specific trades. Given that young people have such narrow opportunities over the compulsory years to find out about activities in the world, and accepting that the atmosphere of secondary schools is unattractive to those moving into adult status, what we now need is comprehensive secondary colleges, bringing together aspects of the senior high school and TAFE and going beyond them. Across the country, schools are struggling with the problem of providing appropriate courses for those who remain to Year 11 but do not want to prepare for tertiary entrance or are unsuited to such a course. While many of the courses being devised have positive qualities, assisting the general development of maturity and often involving link arrangements with TAFE, these courses are in a *cul de sac* in the sense that they lead nowhere. Although students appear generally to enjoy the TAFE units, these units may constitute too early a commitment to a specific area for many students, given that compulsory education is so general, and they offer little which is attractive to girls. They are concentrated heavily on skills usable in secondary industry, which cannot be expected to play a dominant part in increased employment.

The two post-compulsory years are now the most crucial in the whole education system. Unless they can be broadened in emphasis and can lead out into a wider range of subsequent possibilities, there is little point in encouraging increased school retention. A comprehensive college after the compulsory years could allow students to move into an adult atmosphere, combine work and community activities with part-time study, assist the development of an understanding of social change which would enable young people to consider individual futures against a backdrop of wider social understanding, and give pause for the working through of a personal identity. It could provide sophisticated offerings in the arts and for the serious development of leisure activities. Two aspects of the kind of courses offered would be important. The first is that they should include units usable in accreditation and that those units should be accepted in further study of some kind. The second is that the courses should themselves be broadbanded. One of those bands would be standard tertiary entrance courses, but other courses would contain many of the same units and be credited as such. Some broadbanded possibilities might be business studies, including typing, office management, an introduction to accounting, economics, industrial relations, industrial

psychology, an understanding of the technological changes taking place in the area, and familiarity with new equipment. Such courses would not initially lock people into a single level of employment in the general area, but be designed to give a broad overview of it, of related theoretical study and familiarity with the range of occupations within it. Industrial arts, including such practical introduction to a range of skills as are presently included in TAFE pre-apprenticeship courses, history of technology, science in technology, industrial relations, economics, etc. could provide another broadbanded option. Health sciences, people-centred services, physical sciences might provide the core of others. Clearly, the working through of details would be a big task, involving teaching personnel from TAFE and the high schools, employers and trade unionists, those engaged in the particular fields under consideration, and students themselves. Since useful courses could not be offered without considerable provision for practical experience and field observation, wide collaboration would be essential. It would also demonstrate the determination of the whole community to find a place for youth in it and accept the fact that an isolated education system cannot do that. It may be useful to consider participation in the senior colleges as a form of work, drawing pay according to family means. The courses themselves should be developmental in a general sense and not confined to the use of knowledge and skills in paid work, aiming at flexible broadly-based skills and understandings.

At this level of development, young people are generally interested in social issues. Interdisciplinary study in such areas as the assessment of technology and its social effects, of sex roles, of the family in modern society, of energy questions are examples of appropriate emphases. Studies in all areas would not be exclusively bookish, but would involve considerable interaction with the experience of adults in the community. Nor need courses be confined to study on campus. The Canberra colleges indicate some of the possibilities, but the exclusion of technical studies from them is a serious drawback. Cross creditation from them to other education and training is consequently narrow and the vocational emphasis weak. The newly developing comprehensive community colleges in Tasmania offer a possible beginning, since they do combine technical and academic offerings, but the framework considered needs to be wider than would result simply from putting these two traditional elements together.

In general, I conclude that both the complexity of the issues facing us and the future availability of work should now lead to the development of a kind of schooling in which more young people would be happy to stay longer, and that this has implications for both compulsory and post-compulsory orientations and offerings. It is a short-sighted view to reject the idea that the education system has a part to play in the societal changes we are now witnessing. Among the options for youth at post-compulsory

levels, a wide range of possibilities should be opened, only a proportion of which would be in the education sector, at least on a full-time basis. Higher school retention beyond compulsory years must, however, be considered as part of the strategy of attacking high youth unemployment. To scale it out of the count is further to delay changes needed on broader grounds within schooling itself.

Higher Education and Changing Needs

The numbers of full-time students in universities and CAEs will fall over the eighties after a period of phenomenal expansion which doubled student numbers between 1968 and 1978. Even if present participation rates among 17- to 22-year-olds are maintained, student numbers will fall since the age group is itself declining. Mature-age students are already a significant part of intakes and this may continue to expand. Important elements in future demand are government policies governing scale, a decline in the demand for places because of reduced employment prospects, and the drastic reductions in pre-service teacher education now being implemented to bring teacher numbers more into line with reduced openings arising from falling pupil numbers and greatly reduced resignation rates. All resources for new developments must now come from existing programs within the sector itself.

Teacher education has been the core of many CAE programs, accounting for 30 per cent of students and 50 per cent of female students. Teaching has also drawn a significant proportion of graduates in universities, some 26 per cent of arts, science, and economics graduates going on to teacher training. Its decline will therefore have effects more dramatic than those arising from falling demand for graduates in other areas. These effects will call into question many traditional justifications for first-degree general courses and challenge present distinctions between universities and CAEs as the latter seek to divert resources into liberal arts courses and qualifications having 'broad vocational significance'.

If higher education is to be able to respond to new needs in circumstances of contraction, its whole structure will require rethinking to produce the necessary flexibility. When a binary system was chosen in preference to multidimensional universities, distinctions were made between directly vocational courses and those said to be more closely related to scholarship with an international frame of reference. The distinctions in the degree of autonomy of the institutions drawn from this difference are now being challenged in some States. These challenges are related to difficulties in managing contraction which call for adjustments of a cross-institutional nature. This is especially so in relation to pre-service teacher education which, wherever it is located, has a large component of liberal arts and general scientific study. Competition for students between CAEs and the newer universities has now made the whole notion of 'qualification for entry' difficult to define. Institutions are dropping entry

scores to fill quotas, the scores required to enter some CAEs are above those of some universities, and some CAE courses are more difficult to gain entry to than even the most highly competitive courses in high prestige universities. There is also a growing area of competition between TAFE institutions and the CAEs as the latter move to extend community-oriented courses.

Competition between institutions has virtues. It allows the prestige of courses to become increasingly divorced from institutions as such, reflecting student preferences and employment prospects, and perhaps acting as a spur to improved teaching. Duplication can be interpreted in ways which inhibit variety and eliminate the desirable effects of competition. Some basic rethinking of the whole post-school structure does, however, now seem necessary. Instead of looking for a new straightjacket of the Martin Committee kind, it would be preferable to localize responses and to make the whole structure more flexible. In regional centres, multilevel and multipurpose institutions seem the only sensible approach. In major cities, the newer universities could be considered part of a regional complex, with multicampus alternatives for students ranging across them and the CAEs, and each institution having specialized strengths. In such an arrangement, it would not be necessary for a student to take the whole of his or her course within a single institution, so perhaps forcing the institutions into some composite planning and cross creditation. The autonomy of institutions and the special power of universities seem, however, almost to preclude the emergence of new answers. The price of this is likely to be the closure of some institutions.

It would be accepted that expanded provision of higher education in general courses which have broader employment prospects than many specialized ones would be a good thing in its own right. It would provide a flexible basis for short specialized training responsive to changes in labour demand and be preferable to increased unemployment. A good case could be mounted for such an approach, but governments intent on cutting public expenditure are unlikely to be responsive to it.

The nature of the CAEs and their entry requirements could change in ways which would move them decisively into the TAFE field of courses responsive to community demand, including catch-up basic education. This would also have much to recommend it, since after school there is no real place to go educationally unless one wants to enter specific training which does not require qualifications from Year 12 in school, or has such qualifications. Multilevel institutions hold out greater possibilities for cross creditation of units between courses. In some States, pressure on TAFE funds is such that non-vocational provision is being cut. Yet this area is perhaps the one of greatest potential expansion since it is the least well served. Women wanting to reorient their lives after childrearing or obliged by marriage breakdown to assume an unexpected earning role are wanting courses which could pick up where they are and lead into usable

qualifications. People displaced from jobs by technological change and having low initial education have similar needs. The opportunities for unemployed people to reorient themselves and to pursue satisfying and purposeful activities not necessarily confined to specific or marketable skills are small at present. If voluntary or enforced leisure becomes a more important element in people's lives, a demand for serious courses in the arts and recreational activities could mount. Many people working in such areas as refuge centres, youth work, or other avenues of support to people could want courses designed to meet their needs. The mechanisms for discerning such community needs are not well developed. Some CAE funding should be made on a short-term project basis which would allow courses to be worked out experimentally with likely clients to test the degree and nature of particular needs.

Retraining needs will grow. Employers and other groups will want independently to negotiate with institutions for special courses which do not fall within normal funding structures and whose cost may at least partially be met by users. Much post-school education will in future be problem centred rather than being concerned with the passing on and extension of knowledge. Adult practitioners do not in general want the kinds of courses which the institutions have been accustomed to offer young clients. They often have particular problems they want to address and desire a more interactive pattern of teaching and course design. Teachers have strongly expressed such reactions to available courses. This will give a challenging new focus which goes beyond retraining. It is well summed up by Tyrell Burgess (1979):

> If education is to offer any help towards solving the problems of individuals or of society it must do so directly by helping individuals to formulate problems and to propose and test solutions. It cannot do so by its present practice of offering (in Popper's striking phrase) 'unwanted answers to unasked questions'.

It is important that institutions of higher education assume a more active role in service to the community. Regular reporting through public lectures or other media on the state of play in particular disciplines ought to be more common than it is, to take a small example. Policy research of a cross-disciplinary nature directed at major social problem areas, laying out and evaluating feasible options for action, would be particularly useful. Some beginning has been made in offers to fund cross-disciplinary studies on a short-term basis which allows teams to form and reform and the problems addressed to be changed. Academics could become more directly involved in policy formation within government, and in policy evaluation which would not stop at criticism but go on to suggest better alternatives. Much research conducted in universities, especially in the social sciences, including education, is remote from the needs of practitioners and from those in the community who could use expert inputs in

working their way through problems of broad social significance which confront them.

Australian academics, unlike those in some other countries who accept a role of direct public service as part of their charter, are loath to enter such fields. They fear it would compromise their critical role of holding a mirror up to the society. This is not necessarily true. Provided they reserve the right to comment independently on the collective outcome, while at the same time committing themselves as resources to people working through problems accepted as having wide significance, such dangers seem manageable. In education, which is after all a practical activity, practitioners in some places are blazing trails which are in the forefront of the development of new insights. Academics could usefully, and on an extended scale, work with those people, assist them to record and analyse what they are doing, and plan with them how to take it beyond its present stage of development. The La Trobe Task Forces in Victoria have provided good examples of how such activity might be operated.

Apart from the contribution they could make, academics would be well advised in their own defence to tangle more directly with the problems people and communities face, in a spirit of partnership. A wide gulf between academics and practitioners provides fuel for the fires lit by anti-intellectual groups, now commanding considerable publicity. Unless the community witnesses more widely the service which theory can perform in attacking practical and policy problems, and receives more strongly the message that publicly funded institutions discharge an important service role to wide groups of people, the future is likely to be inhospitable to much higher education which does not have a scientific/technological base or is not directly related to labour demand.

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REACTANT STATEMENTS TO THE BACKGROUND PAPERS

5

Societal Change and Its Impact on Education: An Industry Viewpoint

R.G. Fry

Education in Society

The education system does not enjoy an enviable position in our society. So much is expected of it by so many different interests and, in many cases, the expectations are conflicting. Expectations range from the individual seeking some kind of preparation for life and expecting the education system to reward him with the knowledge and values necessary for success, to the social theorist expecting the education system to promote equality and intellectual enrichment, to the industrialist who relies on the system to provide an appropriate workforce in terms of both attitude and skill, to the community which expects the system to provide stable and educated people who reflect the community's values and norms and who will perpetuate these in the future. To this extent, changes in society — in its values and economic structure and in the types of social and economic problems arising from it — all demand some appropriate response from the education system.

Determining the appropriate educational response to the demands of social and economic change is a difficult task. The decision of whose needs are most important is not difficult as there is a consensus that those of the individual are of prime importance. The concern of schools is in the education of the individual for complete development for living, to be carried out in terms of basic skills of communication, values, and attitudes, qualities of character and personality, and capacity for self-expression and satisfying achievement; indeed, as Mrs Blackburn states, to assist individuals to enter the outside world confidently. It seems that inherent in this should be some kind of preparation and training for work which is such a substantial part of living. Work is one of the facts of life, and individuals need the capacity to earn a living in the society into which they are emerging.

Education and Industry

The relationship between education and industry is one of mutual dependence. There can be no doubt that education and training institutions are vital in preparing youth for employment in a vast range of occupations throughout industry and commerce.

The industrial workforce is drawn from many levels of education, ranging from graduates of universities and colleges of advanced education to the early school leaver. Indeed the entry of young people into the industrial workforce is perhaps the most important way in which industry renews and develops its skills. To the employer, skills are of basic importance because they are essential for efficient production and service.

An education system biased towards satisfying the needs of any one interest group, as Mrs Blackburn points out, is neither justifiable nor desirable. Indeed industry does not support the viewpoint that the education system should be totally directed at meeting its needs or narrowly preparing individuals for employment at the cost of imparting the broader values, attitudes, and skills necessary for successful and satisfying living. Living, of course, includes working and appropriate attitudes and skills are as important in the work place as in any other aspect of living.

We are faced, however, with the dilemma that young people, born into a relatively affluent era and in a period of unprecedented knowledge and opportunity and the finest education so far devised by leaders in that field, are unable to find employment which fits them as products of our system of education and of our society. The current rate of youth unemployment — scaling almost 16 per cent — and the difficulties that many young people are having in making a smooth transition from school to work question the success of the current system in satisfying both the goals of individuals and the community. From industry's viewpoint, the inability to fill persistent vacancies in professional, sub-professional, and trade occupations, coupled with the often poor standards of basic skills possessed by many school leavers applying for jobs, also question how well the existing system is satisfying its needs.

Indeed, the reasons for the current debate over how well our education system is meeting the objectives expected by the different groups are easy to understand. Identifying the specific problems and finding solutions, however, is not easy. Moreover, as Mrs Blackburn points out, historically there has been no necessary connection between any social change and an appropriate educational response, and no attack upon the question ever likely to meet with universal acceptance.

The Education System's Response to Recent Social Demands

The authors of the papers point out that the education system, since the 1960s, has reflected social change. As Dr Aitkin and Professor Williams noted, the high rate of economic growth and the increased standard of liv-

ing enjoyed during this period, as well as the persuasiveness of certain prominent politicians, have perpetrated quite major changes in our education system. Notable was the huge amount of public money poured into universities, which grew in number from around 11 (including two university colleges) in 1960 to 19 in 1980, and the consequential restructuring of the school education system towards university entrance qualifications. This accompanied a heightening of community beliefs in the virtue of university education, without much serious thought about what end was to be achieved.

The process of increasing the numbers of universities resulted in a reduction of the training facilities offered by technical colleges. Funds were reduced, their expansion curtailed, and generally the sector fell into disrepair. The opinion seemed to prevail that the trades would somehow look after themselves, perhaps through apprenticeship. This shortsighted action reflected very much the view to which Mrs Blackburn referred, that a trade is an occupation of those who have failed to achieve university entrance and that anyone who entered a trade was somehow inferior in skill to a university graduate. In due course the loss has been recognized; and governments, both federal and state, have been attempting to revitalize the technical and further education (TAFE) sector.

The Need to Rethink

As Dr Aitkin pointed out, the great increases in spending on education accompanied a substantial improvement in the intellectual quality of Australian life. However the realities of recent years — the slowing down of economic growth, high unemployment, and extreme pressure in the job market, along with particular persistent manpower shortages in certain occupations — are questioning the value of the educational dollar.

There is no doubt that the huge injection of funds into the universities and colleges of advanced education sector at the expense of technical education was one of those ill-informed responses discussed by Mrs Blackburn. The resulting system appears unable to satisfy individual or community needs and to this extent requires rethinking. Part of this rethinking must focus on the academic orientation of our secondary school system and the system's inability to accommodate the needs of groups of students of varying aptitudes and intelligence.

A great deal more emphasis needs to be placed on the transition from school to work process and, in so doing, educating individuals more thoroughly on the nature and demands of the work place. It has been estimated that approximately 50 000 students per annum drop out of the school system with no particular qualifications or marketable skills. These school leavers are those least competitive in the market place and those who inevitably are forming the large group of unemployed youth in our community. Mrs Blackburn believes many of these school leavers are

'propelled more strongly by the desire to get out of school than by any positive plans about what they will do'. This is reflected in the comparatively low school-retention rates in the post-compulsory years in Australian schools.

Mrs Blackburn and Professor Crittenden point to the need for greater relevance, in the compulsory and post-compulsory years, to the particular needs of students. This is a view to be supported. Indeed the Metal Trades Industry Association has canvassed, in front of many government inquiries and educational groups, the necessity to modify the existing system in order to assist young people, by incorporating additional streams in later school years and by increasing work experience and vocational guidance programs.

Mrs Blackburn has little confidence in the recently announced Transition from School to Work Program. Yet, I believe, if appropriately administered, it has the potential to place emphasis on the development of personal and technical skills and on vocational guidance which could assist young people in attaining satisfaction beyond the school environment.

Dr Aitkin believes that changes to the education system cannot contribute greatly to the alleviation of unemployment but could, at least, make being at school a better alternative than being unemployed. As Mrs Blackburn points out, this will be greatly dependent on how closely reality and the schools resemble each other, how well theory is related to practice and to life in the world.

The participation of industry will be necessary if greater reality is to be injected into the education system. In the light of this need for closer communication and co-operation between the education system and industry, the setting up of an Education Commission in New South Wales, with no specific provision for industry representation on the Commission, is totally unacceptable. Industry has very close and worthwhile liaison with the TAFE system: yet, with the schools system, contact is negligible. Although the TAFE system is a special case as it is directed to vocational education, much of the value it gains from regular contact with industry could accrue to the school system if regular liaison with industry was formalized.

The Future

There appears a consensus among the authors of the background papers that economic factors determine, in great part, social change. There are certain economic factors and realities which will characterize the next decade or so and will impinge on the education system. Technological change is one of them. Professor Williams's analysis of technological change is realistic and positive. In emphasizing its essential role in Australia's future industrial development and in pointing out that its introduction has not and need not, in the future, be accompanied by

social disruption and unemployment, he makes a much-needed contribution to the current debate.

The impact of technological change on the demand for labour in manufacturing has been negligible over the past few years. A survey conducted by the Australian Bureau of Statistics to determine this (published March 1980) indicated that 61 per cent of manufacturing employers who were surveyed believed that technological change had no effect on employment levels in their enterprises, only 4 per cent had retrenched labour because of technological change, and 19 per cent had in fact recruited labour because of such innovation. I do not share Mrs Blackburn's view that employment opportunities will be few in the manufacturing sector. In 1979 for the first time in four years, employment increased and a further moderate increase is predicted in 1980. Further, it is a widely held view that, in the future, manufacturing industry has the capacity to provide the greatest number of job opportunities in our economy. These opportunities will not be confined to trades but will cover a wide range of occupations, including clerks, secretaries, managers, and process workers.

The demand for skilled people, especially certain types of tradesmen, is strong in the industry, the needs exceed the available supply, and the capacity of existing sources to meet them is inadequate. Indeed, in the metal and engineering industry, there exists a serious shortage of tradesmen involved in the cutting, shaping, and joining of metals and allied materials. The demand for such tradesmen will continue at a high level, despite what is said about the effects of technological change, and will increase greatly as the industrial development projects planned begin to come on stream. It appears unlikely that even with the injection of further efforts and initiatives into the apprenticeship system, sufficient tradesmen will be trained to meet the needs. A further source, with the potential to produce significant numbers of tradesmen, will be required. There is a growing belief that this will involve a greater reliance on institutional training. This would mean the development within the TAFE sector of courses and facilities adequate to producing an individual who would require only a suitable period of experience in industry to achieve full recognition as a tradesman. The demands of such a scheme on education funding, and on the education and training system as a whole, will require careful examination and analysis.

Conclusion

Most predictions for Australia make the point that the labour market will remain highly competitive. Individuals entering that market must be given the best opportunity to find their place in it and this is, in great part, a responsibility of the education and training system. From industry's point of view, it can provide employment only if the personnel available have the education and skills required.

6

Societal Change and Its Impact on Education: A Reactant's Statement

Douglas A. Jecks

Support for Education, 1970 and 1980

The major papers point up the loss of public support for education which has occurred in recent years. In one sense, this states the obvious. However, it is important to stress the downturn which has occurred. Mrs Blackburn claims that there will be an insistent demand for greater efficiency in demonstrating educational results, and Professor Aitkin claims that there is no enthusiasm for increased education spending in 1980 among the major political parties. He further states:

> ... those expecting a revival of support for the claims of the education system in the disbursement of public money are going to be disappointed if they are relying on the mood of the present electorate.

At the National Seminar on Educational Planning, which was held in Canberra in 1968, the New South Wales Director-General of Education, Dr H.S. Wyndham, questioned whether education was a significant electoral issue. This was soon to change. By 1970, education was accepted by the Labor Party as a key federal electoral issue. This policy derived from the Labor Party's analysis and assessment of community needs and aspirations. There was a public mood that education should be supported more adequately, a sharp contrast with 1980. In part, at least, this mood resulted from a campaign by parents organizations and by teachers unions to urge the Federal Government to assist the States financially so that education would not be 'starved of funds'.

This campaign was based on the general argument that the States did not have the financial resources to support education adequately and that additional federal funds were essential. In 1961, 1964, and 1968, the Premiers had asked the Prime Minister for Section 96 grants to assist them in meeting their steadily increasing recurrent and capital costs related to education. On each occasion, the request was rejected. By 1970, there

was a widespread feeling in each of the States that the Federal Government should provide funds for education. Indeed, there was a strong view that the States simply could not cope with the financial needs of education. The media were giving increasing support to this line of argument. Typical of press support is the following comment in *The Advertiser,* a local newspaper in the Parramatta area which had a distribution of some 100 000 copies.

> On June 4th a half-page advertisement regarding the mass meeting of parents and teachers called for June 9th was published. On the same day The Advertiser devoted a full page to deficiencies in local schools. The main headline was 'Our Schools — One Big Mess'. There were five news reports, each with its own headline. These were: 'They Sit on the Floor', 'Enrolments Refused', 'Roof's Falling In', 'Bursting at Seams', and 'Floors Rotting'. Photographs were included. The 'One Big Mess' headline certainly suited the conveners of the mass meeting to be held five days later. An editoral, which was headed 'Education Crisis', set the stage even more. It said that 'education around Parramatta' was 'truly in a state of crisis' and asked the federal member of parliament, who was the federal Minister for Education and Science, what he was 'going to do about this disgraceful state of affairs'. (Jecks et al., 1974)

In brief, there was a strong support for education during the early seventies up to the time of the election of the Whitlam government, and, in its first two years in office, that government took major initiatives to provide federal funds for education. However, by the time that its third budget was brought down in August 1975 (the Hayden budget) there was a distinct change. When the Fraser government regained power in December 1976 it promised that it would cut government spending; cuts in educational spending followed.

Once the economic downturn occurred from 1974 on and unemployment increased, a number of questions immediately arose. First, there was the question of whether it was worthwhile going on to study in a tertiary institution. When there are more qualified teachers, architects, geologists, engineers, and lawyers than can be employed, there must be substantial doubt both regarding the purpose of, and the value of, enrolling for these courses. There is also substantial doubt that public funds should be spent to produce surplus teachers, surplus architects, surplus geologists, surplus engineers, and surplus lawyers. Students and their parents rapidly changed their attitude from one of support to one of doubt and even of hostility. Second, similar doubts developed at the secondary school level. There is the question of whether it is worthwhile staying on at secondary school beyond the compulsory school attendance age of 15 or 16 years. To what practical end does further study lead? Is it worth foregoing possible earnings for more education? Third, there are doubts related to standards achieved by students, and these doubts include primary, secondary, and tertiary education. Of course, this general question always exists. However, in hard times, the question is more pointedly and more frequently raised.

To sum up, as economic conditions worsened from 1974 on, public attitudes towards education and the level of public support for education, which was evident in 1970, diminished. This matter of public attitudes is a significant issue presently facing those working in education. There is irony in the situation where, just as additional funds flowed to education between 1970 and 1975, there was an economic downturn. This juxtaposition was most unfortunate because, while there was no cause–effect relationship, it did help to lead to a loss of public confidence and support. Indicative of the change in media support is the following extract from the leading article of *The Advertiser* (Adelaide) on 28 March 1978, which noted the then recent publication of the Anderson Report in South Australia, pointed to the drastic changes which had occurred in Australian education, and stressed that a re-assessment of education was necessary. The leader writer described the political view of education thus.

> Education has long been one of the most sacrosanct issues in Australian politics. For motives ranging from genuine commitment to ideals of equality and social justice to cynical sectarian vote-buying, both major political parties have maintained the rhetoric of more and better education. The general principle that the community has the responsibility of providing proper primary, secondary, and tertiary facilities and that there should be equal accessibility to them are firmly entrenched in our political and social psyche.

Further evidence of this mood of questioning and re-assessment was contained in an advertisement in the newspaper, *The Australian*, on 9 April 1978. This advertisement stated that the government of New South Wales proposed to conduct a series of public seminars on education, and that the first such seminar would take as its theme: 'Is it time for an education audit?'. Since 1974, there is little doubt that there has been a strengthening and more widely held view among both the public and politicians that an education audit is overdue, and this is evidenced in part by the nature and frequency of recent inquiries into education. The question of public support for education is a matter of concern to most educators. It is not a problem which will be solved either easily or quickly by some public relations campaign; there is a long haul ahead.

Limited Growth

The long period of continuing growth in Australian education since 1945 brought with it an annual increase of funds, the erection of many schools and some tertiary institutions, a significant growth in the number of teachers employed, and rapid promotion for many of them. At the National Seminar on Educational Planning in Canberra in 1968, one of the background papers was prepared by Borrie (1969). In this paper, he pointed to the fact that a plateau in growth might be expected in the years immediately ahead and that school authorities should take the opportunity to consolidate. All of the state directors-general were present, and

each expressed doubt that Borrie's prediction would come to pass. All members of the seminar took the view that growth would continue and that even if it slowed, as Borrie predicted, this slowing would be very limited and no more than a fleeting breathing space before the next major upward trend.

In the mid-seventies when it was apparent that growth was slowing down and that there would be an oversupply of teachers, both teachers and administrators were caught rather unawares. Now that the realities of limited growth are evident, it is important that the associated problems are defined and faced.

First, there will be an end to growth as an objective in itself. Administrators who are freed of the need to cope with demands for more student places, for more classrooms, for more schools, and for more teachers will need to define other administrative objectives. One of these will be the need to maintain vitality in a school system where there is little or no growth. That is a novel prospect in post-1945 Australian education. Second, there will be a need to consider teacher morale in a situation where promotional opportunities will be much reduced and very able younger teachers find their line of advancement cut off. Administratively, this issue will need early attention and an alternative reward system will need to be developed. This is a matter which will concern the teachers unions also, as past industrial attitudes and policies will be unsuitable. Third, there will be a loss of those additional funds which were available year by year in the time of growth. These funds enabled a whole range of activities and changes without too much effect on the ongoing operation. Once these growth funds are significantly reduced, or even eliminated, there is the chance that financial and administrative flexibility will be so limited as to be ineffective. This should force a critical analysis of the ongoing operation. While this may well be a difficult task, an examination of how to re-deploy existing resources could well have positive outcomes. Certainly, some new activities and some changes will be necessary even if there are no growth funds.

The eighties will be strikingly different from the 1945–74 period, and the sooner that administrators face squarely the problem of no growth and of declining school enrolments, the better. Similarly, the sooner teachers and their industrial organizations realize that they are in a distinctly new phase where new policies are necessary, and have some appreciation of the basic arithmetic underlying problem areas, the better.

Local Control

Professor Crittenden notes that the central education departments have slackened their hold of the school system and that in various reports there has been support for the devolution of responsibility from the central system to individual schools. He also notes associated problems, and quotes from Schools Commission reports to indicate that these problems

are well recognized. In any discussion of the organization and administration of education in Australia, it is impossible to avoid the issue of centralization versus decentralization or some intermediate step. In Australia, one key problem is that the central education department provides all funds and other resources.

Earlier overseas critics contrasted the Australian system with the pattern of local control (and local taxation) to which they were accustomed (Jecks, 1971:162–73). It is very important to understand the close relationship of funding and control. In fact, some could argue that as the central government is providing the money, then the central government and its bureaucracy have a wholly legitimate right to control all of the particular units funded. One of the strengths claimed for local control and taxation is that the local community can be much more responsive to the needs of a particular school. That is, if a community wishes to develop a program in vocational education or Asian languages, then it might choose to tax itself more heavily to achieve these ends. On the other hand, in a 'tax revolt' situation, the local community might choose to reduce the direct school tax it pays, and cut the educational program. Some of those who have argued for local control of Australian schools have tended to ignore that, in North America and in the United Kingdom, it was the members of the local community who paid. During the past 25 years, this situation has changed as central governments in North America and in the United Kingdom have contributed increasing proportions of local school budgets. Even so, there is still a local taxation effort. My purpose is not to argue the advantages or disadvantages either of local control or of centralized control. Rather, I am seeking to point up that it is not possible to draw a direct parallel between local school systems overseas and the centralized government school systems of Australia.

In 1960, Davies had this to say about the Australian system of government:

> There is then, we may say, a natural tilt of the board in Australia against decentralization . . . The characteristic political form of the countryside is not the local committee of management, but the deputation. The Country Party is merely its apogee. There has always been in the Australian country-dweller (and not only the country-dweller) a decided preference for waiting your turn in the bureaucracy, rather than making your own pace by voluntary effort. This is, of course, part effect, as well as one cause, of the futility of the local government system, but one does well to recognize that nine times out of ten the 'local demand' is for 'equal treatment' or 'uniform provision' rather than 'let us handle this ourselves in our own way' . . . The paradox in the Australian situation is, of course, the fact that the better the state administration performs, the less will popular grievances tend to spill over into demands for decentralization. Educationists may well be right in thinking that affluence may bring out behaviour in local communities that poverty and hardship could not. Let us hope that they are. But we should

> appreciate the fundamental novelty of such participation in Australian political life. (Davies, 1960:156–7)

Local control of education has at least two essential elements. One is that there is a local school budget with spending dependent on local decisions. Another is that there is local control of staffing matters. In Australia, the professionals may claim that they should control these elements at the local level. However, much of the argument is towards granting control to the local community. In the Australian setting, it would be foolish to ignore the inherent clash between local professionals and local communities. Professor Crittenden sums up:

> ... the Schools Commission is surely correct when it claims that the development of a proper balance between the freedom of individual schools and the political responsibility of those who have authority in the system as a whole is among 'the most important tasks facing public education in Australia'. In working at this task we should not take the scale of the systemic level for granted.

Professor Aitkin notes that Australian education is run by governments, and I suggest that any devolution of funds and control to the local level will be purely a political decision. Some may argue that the powerful bureaucracies will automatically oppose devolution and that ministers and governments will not want to hand over any element of the control which they now have. Others may argue that there has already been a devolution to the local community or local school level. In considering this second argument, it is important to realize that a large organization can decentralize in a limited way, merely by establishing branches where the officers of each branch see their first loyalty to the central organization and follow central policies, rules, and regulations, and consider themselves as 'birds of passage' who sooner or later will move to the head office if the central organization or to another of its regional branches.

It has been my purpose to point up some of the problems associated with the centralization/decentralization debate. If any real measure of decentralization occurs, with local control of significant spending and staffing, it will be a major break with past political policy. If local control of curriculum is to develop further, there is a need, as Professor Crittenden has well highlighted, to clarify particular points of policy and procedures.

Recurrent Education and New Type Institutions

At Columbia University in the mid-sixties, Clark claimed that it was inaccurate to suppose that the traditional education system in the United States (early childhood education, primary, secondary, college, and university) was any longer coping adequately with the educational needs of American society. He argued that in the United States a more significant research effort was taking place outside the traditional college

and university system and that the research budgets, manpower, and effort of firms such as IBM, Bell Telephone, and Du Pont (and of some United States government agencies) dwarfed the same resources and work in tertiary institutions.

Clark and Sloan published four books — *Classrooms in the Factories* (1958), *Classrooms in the Stores* (1962), *Classrooms in the Military* (1964), and *Classrooms on Main Street* (1966) — in which they showed the major educational effort that was taking place outside the traditional system. They were in the forefront of those who, from about 1950 on, argued that any adequate twentieth century educational system would have at its heart the fact that, in technologically advanced societies and economies, education would continue throughout a person's lifetime, and not be restricted to the traditional system which dealt mainly with those persons aged 20 years and below.

Clark argued that the traditional high school system was focused on the intellectually able and that, too often, many students (in some American States required to stay at school until 18 years of age) found the high school program to be an educational wasteland. He showed that in 1964 there was a tertiary system comprising some 2000 colleges and universities but that there were some 35 000 other post-school institutions which carried on significant and substantial educational programs. Clark claimed that in 1964 some two-thirds of all education in the United States was moving through channels other than the usual primary, secondary, college, and university system. While much of this related to the adult and continuing education of the so-called average person, Clark cautioned those working in the tertiary system not to assume that they were superior and pointed out that, in his opinion, the most advanced teaching and research in a field such as chemistry probably took place among the staff of Du Pont, which employed some 2300 PhDs in chemistry, rather than at Columbia University which employed only some 20 professors of chemistry. In short, Clark argued that there was a large and effective alternative post-school educational system operating in the United States, which had developed largely because the traditional system had not coped with satisfying real needs.

All four major papers point up the need for continuing or recurrent education in Australian society. In particular, Professor Crittenden highlights this issue towards the end of his paper:

> It would be desirable, I believe, to modify the direction of our present policies and practices as they affect secondary schools (and are increasingly being felt in tertiary institutions) . . . (c) to provide a variety of alternatives to schooling for adolescents after the age of 14 who simply have no interest in continuing any kind of systematic, full-time program of general education; (d) to develop a sophisticated apprenticeship system for all kinds of trades (and professions), in which educational institutions would collaborate; (e) to provide a variety of formal and informal agencies of systematic general education to which people would have access throughout their adult

> life. In summary, I think we should at least give serious consideration to Goodman's claim that 'by and large, it is not in the adolescent years but in later years that, in all walks of life, there is need for academic withdrawal, periods of study and reflection, synoptic review of the texts'.

Mrs Blackburn claims that the school system 'fails to take seriously enough the needs of those who move out of it at the end of its compulsory phase into the adult world' and argues both for procedures to give those with low initial education 'special catch-up support' and for a 'post-school structure with more levels of entry'. The proposition that, in the Australian system, there should be post-school opportunities for those who want and/or need continuing or recurrent education will have few opponents. It is an area where there has been more rhetoric than increased provision, and one may wonder whether the present secondary, technical and further education, college, and university system is still not more occupied with traditional roles and operations.

There may well be a case for different type institutions which are not in the traditional mould. Mrs Blackburn suggests a new type of post-school institution and talks of multilevel institutions which would include catch-up basic education in its range of courses.

Professor Crittenden refers to the report, *Tasmanian Education: Next Decade.*

> ... it argues for the establishment of multi-purpose community colleges that would replace the existing secondary and technical colleges and also include various forms of further education ... The proposed community colleges seem to belong to the species 'post-secondary, non-tertiary'.

Then, after discussing the Tasmanian matriculation colleges which were later renamed secondary colleges he states:

> Now the TEND Report wants to replace them altogether by a super-comprehensive community college. Ironically, it seems that the only significant interests that are not to be accommodated by this arrangement are those of the minority who wish to acquire an adequate background for university studies.

The Australian Schools Commission

The Australian Schools Commission was a product of the Whitlam government, and has the function of recommending to the federal government the funds which should be made available to schools and to school systems in order to ensure acceptable standards. In 1975, when its recommendations for the 1976–78 triennium were not accepted by the Whitlam government, there was a strident outcry from both parents and teachers organizations. But it is important to remember that the combined recommendations of the then four federal commissions was $6026 million at 1975 price levels; some $9250 million at 1980 price levels. The total sum was too great to be acceptable, especially as both a public and a political reaction against education had already commenced, even though it

was still less than three years after the heady days of the 1972 federal election.

It is not difficult to suppose the problems inherent in a situation where the Schools Commission's interpretation of 'acceptable standards', and the necessary rate of progress towards these, differs from the view of the federal government of the day. This possibility was heightened when the Fraser government assumed office in December 1975 after an election campaign in which it promised, if elected, to cut government spending. The Schools Commission is placed in a difficult position. On the one hand, the Fraser government is committed to reduce government spending. On the other hand, the vocal and powerful education lobbies look to the Commission to recommend expenditure according to real needs. For the past several years, the government has established firm guidelines specifying the total funds available for a given year. Thereafter, the Schools Commission is limited to sharing these specified funds among a range of policies and projects.

There is little doubt that the various education lobbies will champion the Schools Commission in any conflict between the Commission and the federal government. For its part, the Commission must consider how best to advance the interests of the schools notwithstanding the conflicting pressures it faces both from government and from the schools sector. In July 1976, the Commission summed up the position thus:

> The effect of guidelines . . . is to make a distinction between the statutory obligation of the Commission under Section 13(2) of the Schools Commission Act 1973 to report to the Minister of the needs of '. . . schools in respect of buildings, equipment, staff and other facilities and the respective priorities to be given to the satisfying of those various needs . . .' and the task of reporting to the Government on the best use of a pre-determined level of financial resources. The Commission must continue to study and report on the needs as it sees them but it must also, as a second task, advise the Government on the pattern and priorities for expenditure of already determined levels of funds. The advent of guidelines highlights the fact that the Commission now serves the Government both as an independent assessor of needs and, once broad decisions have been taken on that advice, as adviser on the priorities for the most appropriate allocations within the total funds available. (Australia. Schools Commission, 1976:1–2)

The Tertiary Education Commission, which replaced the three former federal post-secondary commissions, faces the same problem in that it, with the assistance of its three councils, distributes a sum of money which is decided politically and not on a 'needs' basis. One critic has rather unkindly described the process as a 'butcher's job'.

In August 1978, the Tertiary Education Commission reported back to the federal government noting that the government had reduced its recommendation by $39 million. The report went on to say:

> The Commission is concerned at the consequences of this reduction, particularly as it affects recurrent expenditure . . .

> As a result of this, together with the need for institutions to meet unavoidable cost increases not covered by supplementation (for example, movement of staff up incremental scales, changes in superannuation arrangements) institutions have been under a steady pressure to economise in the use of their funds. In any given year, the impact may not appear to be great compared with the previous year; however, these pressures commenced in 1976 and their effects have been cumulative. By the end of the coming triennium, institutions will have been obliged to economise to the extent of some 5 to 6 per cent compared with the standard of operations obtaining in 1976 . . . In the Commission's view, the cumulative effects of this continuing tightening of recurrent funds will not only erode the quality of the work in both the universities and colleges but will inhibit innovation and the capacity of institutions to adjust to changing community needs; these effects are already becoming evident. (Australia. Tertiary Education Commission, 1978:23–4)

Both the Schools Commission and the Tertiary Education Commission have the potential to play a valuable mediating role between the federal government and particular school systems or particular institutions, and between the government and pressure groups. Some would argue that the best deal educators can expect is that the Commissions' professional advice will be given due consideration by the government, which quite properly will make the final political decision, and that to expect any more is to be politically naive.

Professor Crittenden concludes his paper with the following statement.

> The future role of the Schools Commission is itself a question that deserves careful discussion. Rather than being reduced to the dimensions of a budget advisory committee, the Schools Commission should be strengthened in the part it has played in exploring the guiding theoretical framework of public policy and in encouraging a more informed critical debate in the society generally. As the Interim Committee observed in 1973, 'in the long run, consideration of the purposes and values of Australian education is of greater importance than any short-term accretion of resources'. What we urgently need is more systematic work on the theoretical bases of our public policies in education.

It is a statement which can be applied equally as well to the Tertiary Education Commission.

An Adequate Data Base

In discussing any issue in a meaningful way, an adequate data base is necessary. I am not suggesting that there should be an attempt to quantify every educational issue, but I am saying that any consideration of an issue can be much more meaningful if the participants are aware of associated data. For example, if the university and advanced education sectors of tertiary education are arguing for considerable building programs to cater for increased enrolments, at a time when projected demographic data show a probable falling off in the number of students in the 17–22 age

group entering tertiary education, then it is obvious that a case either cannot be argued or must be argued on a basis other than increased enrolments. This other case may relate to the need to replace old buildings, to increased participation trends in the age group 23 years and above, or to the fact that there was a serious lag in the provision of new buildings during the past decade. Again, it is possible and necessary to develop data related to each of these arguments.

There is a need for continuing research and the regular and systematic annual updating of publications to provide adequate data for those involved in Australian education. In the past, and especially up to about 1970, the data available were limited and inadequate. The entry of the Commonwealth Government into education, and the associated increased costs, caused its departments and agencies to develop a much broader data base, including specific focus on particular issues.

I found that the Williams paper gave a valuable economic perspective in relation to societal change. In the other papers, too, each set of data presented facilitated a better understanding of the general argument.

While my present argument is stressing the obvious, I am seeking to highlight that researchers could make a significant contribution to Australian education if there was regular updating and publication of the basic data of Australian education. At the present time, much of these data are scattered through various research reports and publications. Further, there are some significant gaps in the data available, even though there has been a great improvement in recent years. It would be a valuable exercise if presently scattered and incomplete data were collated into a number of appropriate publications, and research undertaken to extend, improve, and verify the data bases of Australian education. This seems a proper matter for this conference to consider.

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7

Societal Change and Education in Retrospect: Reactant's Paper

Joan E. Kirner

August 2005

My dear young friends,

Thank you for the opportunity to address your Youth Assembly on the topic 'Societal Change and its Impact on Education'. The theme is not new, as you would recognize. A quarter of a century ago, in 1980, I listened to speakers on the same theme at the Invitational Conference of the ACER in Melbourne.

It is a great pleasure, therefore, for me to stand before you today and share with you some of my experiences of the last 25 years. I am speaking as a member of the older generation who, since the 1970s, has fought the battles for the extension of the right of all people to have access to a satisfying education and, in particular, to have a say in what that is and how it might be achieved.

Participation Rates

Given your current obligation, as 15- to 19-year-olds, to contract with one of our many education institutions for a continuing education program, you will be amazed to hear that, in the early 1980s in Australia, nearly half of your age group was out of school by the age of 16. This compared unfavourably with countries like Japan, USA, Norway, France, Belgium. The situation was a product of 20 years of full employment and a tendency to import rather than train our skilled people.

When the bubble of full employment burst in 1974 and the resources boom, the technology revolutions, and the energy crisis demanded a new approach to education, far-sighted people like my old friend Jean Blackburn convincingly argued that not only did we have to find ways to extend the participation rate in education, but we had to develop a curriculum which valued success in learning for all students, not just the minority who went on to university.

I can remember how infuriated Jean and I were with one of Professor Crittenden's lines at the 1980 Conference. His paper called into question 'why 15- or 16-year-olds *who have little ability or interest in any kind of serious intellectual activity,* should be kept on at school for a very diluted form of education'. Professor Crittenden was always an eloquent critic, but he was not much help to people trying to get on with the teaching and learning task in schools. He could never make the jump from equating 'serious intellectual activity' with theoretical subject-based studies to what we now know is possible, and what Jean was advocating: the stimulation and development of intellectual activity through practical experience in the world of work or politics, environment, or culture.

Yet, if he was here now, I hope he would be pleased with the many Student Action Research Centres dotted around the country and linking schools with tertiary institutions. These centres enable a cross-section of students (in age, class, and sex) to develop their intellectual and instrumental skills through community-based research. Thus Jean Blackburn's plumber's apprentice now not only values trade skills, but understands the right and ability to influence decisions on the disposal of waste in major urban areas.

In these centres, conventional learning, disciplined effort, and excellence are revived by challenging students' values, knowledge, and analytical skills at the same time. Don Aitkin's hopes for political education are achieved, not by the study of the subject, but by working through the content of issues (energy, transport, abortion, strikes and capital and labour) in ways which enable students to understand, resolve, and act on issues about which people disagree (Schools Commission, 1980). Jean Blackburn's belief in the need for an increased participation rate has been assisted by a scheme which taps the motivation of students previously 'devalued' for their apparent lack of interest in intellectual activity.

Youth Guarantee (OECD, 1980)

Yes, my young friends, you can be thankful you were not teenagers in Australia in the eighties. ('Teenager' was a term used by society then to describe an age group whose adolescence was exploited rather than supported.) At that time, one in four of our young girls and one in five of our young boys were unemployed and required to live a life of non-contribution to society, on the dole.) Their plight was ignored whilst controversy raged all through the eighties on which economic road Australia should travel — the boom-town quarry for the international world or the pioneer of a self-supporting, limited growth, equitable distribution society. We all know now that we struck a balance between these extremes, once Australians insisted that the decision was one to be made by Australians.

Part of the balance struck was the introduction of a youth guarantee policy which acknowledged the long-term problem of youth unemployment. It was an essential move to restore the confidence of young people

in their society and in themselves, after a decade of being devalued as mere pawns in the search for economic prosperity.

Our Youth Guarantee scheme is not perfect, but it is light years ahead of the Transition from School to Work Program introduced in the 1980s by the Federal Government 'to make unemployment the least acceptable alternative', by upgrading the skills of students, thereby making them more employable!

The 'blame the victim', 'scapegoat education', remedial 'band-aid' approach failed miserably. Eventually it was revamped into a program which (a) revitalized school curriculum in the area of increasing understanding of the world of life after school; (b) guaranteed placement of youth in work or study or a combination; (c) provided an adequate system of allowances.

Because of the work of people like Professor Peter Karmel, Gil Freeman (a teacher in the Brunswick Schools Cluster), and groups of parents, teachers, employers, education planners, and students determined to have something better, you now have a Youth Guarantee program which offers young people several options:

> full-time work with career prospects which include built-in breaks for further study (in those days only academics had that opportunity);
> part-time work, part-time study (often sharing with an older person who wants more leisure);
> full-time study in a place of the learner's choice — institution, shop front, neighbourhood house, out-station, and own home; (What an asset the development of the ABC's independent education Open Learning channel has been for home and community-based learning — especially when backed up with the visiting tutor/book/toy/library scheme!)
> a minimum income guarantee for those who choose not to do paid work, but are prepared to contribute to the richness of our society in another way, e.g. small business co-operatives, the arts, child care.

The endorsement by a new social democratic government's youth guarantee policies certainly confounded the 'excess of teachers/declining enrolments' argument that the protagonists of the private sector were using to cut back public sector expenditure in the 1980s. I am delighted that, in 2005, we have a community sufficiently educated to resist the imposition by those protagonists of 'a fake standard of what is and what is not desirable' (Berger, 1977).

Our younger generation now demands answers to the essential questions that, in the 1980s, very few people were prepared to ask: 'Who should make the important decisions?' and 'In whose interests?'.

Social Accounting (Lindquist, 1980)

I might take this opportunity to congratulate business people and union leaders for the part they played in making a Youth Guarantee policy possible. The single greatest impetus to the increased quality of life enjoyed by all people now in Australia, at the beginning of the 21st cen-

tury, was the move from an accounting system entirely designed to satisfy the interests of capital to a social accounting system. That is a system which took into account, on the credit side, gains to employees in conditions, measures to lengthen the product life-span, consumer satisfaction, effect on employment, and the obligation to train or retrain. Until this historic move was accepted by all parties, initiatives such as Youth Guarantee were regarded as expenditure and therefore rejected. The requirement for social accounting was also applied to education and it gave a tremendous boost to the move from 'inspectorial' models for accountability to the local school community model (VFSSPC, 1980).

Decision Making

Much was said and written for the 1980 Conference about the move to decentralization of education in Australia. Donald Aitkin argued that we would probably not see much change in our broader political structures, and he was right in the sense of the maintenance of the two-party political system. But he was off beam in his discounting of the impact that the conflict over the control, use, and distribution of resources would have in strengthening democracy by strengthening the popular movements in Aboriginal land rights, consumer rights, uranium, and environmental issues. Once these movements forced, through both state and federal parliaments, a Bill of Rights and a Freedom of Information Act, the people had more power to insist that Parliament reassert its power as the protector of democratic decision-making (Scutt, 1980).

Looking back, the debate on decentralization in education had a slightly hollow ring. Most people in power were concerned about decentralization of administration, not transfer of powers over staffing or funding or curriculum to the local level. The ACER 1980 Conference certainly challenged what was meant by decentralization and devolution in Australia. In particular, Jean Blackburn's prophetic challenge still rings in my mind.

> We need the kind of teaching and learning which extends people's power to identify and tackle their own problems, both individually and collectively. It is now reasonably well established that structures and systems which allow and encourage teachers, parents, and students to do that at local level give the best promise of schooling. A well-articulated general rationale, within which this can take place without locking students into mental ghettos or purely localized understandings, is now one of the most urgent practical problems facing education.

In the year 2005, we have taken up the challenge in a variety of ways. Attitudes have changed and teachers now see parents as allies in improving learning rather than as constraints; this has had a marked effect on the confidence that working-class parents have in teachers and in their own competence to affect schooling. Certainly, the impact of the regional conferences organized during the 1980s by the Victorian parent and

teacher organizations on the topic 'Who Owns the Curriculum?' was an effective response to the Victorian Government's claim, through its Green Paper, that the States should decide core curriculum.

Parent organizations have considerably strengthened their information and support networks for individual parents and organizations in local communities. In 2005 the role of parent advocat in the school system is a major force in influencing decisions, and the research study they commissioned on the effect of working fathers on parent participation in education had a significant impact!

The processes encouraged by the Schools Commission Disadvantaged Schoools Program have spread to all schools with the requirement by each State Education Commission that each school develop within its community at least once a decade a 'renewal plan'. Such a plan must generate short-term and long-term goals which represent a balance of the community's aspirations; and the accompanying strategy plan has to demonstrate the role each interest group in the community (including parents and students) will play in working towards the negotiated goals.

The Codes of Practice that I have seen go some way towards answering Brian Crittenden's long-held concern about the position of professional expertise in a devolved decision-making structure.

The adoption by the national government in 1992 of a new framework of federal government, based on the creation of regional authorities with broad powers across the whole range of social agencies, has significantly affected the development of education. I note that at this Youth Assembly you are going to evaluate the effect of that radical change in structures and develop strategies for improving its effectiveness.

The Chicken or the Egg

Many of the education conferences which I have attended over the last 40 years have debated the issue of whether, and how far, education has impact on social change and vice versa. I remember, at the ACER 1980 Conference, trembling at the thought of my task of responding to the eminent Professor Halsey's paper on this point. I would have been floundering if he had not endorsed and thrown new light on his view that education has an important role to play in attacking inequalities.

The 1980 Conference was timely. It came at a time when stiff competition for resources in education was lessening equality of opportunity, and directing the emphasis on attention towards investment in the gifted, vocational training, and various strategies for greater 'privatization' of education.

Work Value

Twenty-five years later, we know Jean Blackburn, Professor Karmel, and Professor Halsey were right. Education can impact an equality of oppor-

tunity. We also know that it can do this best when related to a whole set of complementary social changes. We accept that an individual's valuing of education is closely related to society's evaluation of each person's work value — one task for the 21st century is to revalue all the work done in our society in ways which allow rewards to be based not on the years of study or the degree of responsibility (these are rewards in themselves), but on the contribution each individual's work makes to the common good.

We are only just beginning to accept how disgracefully unjust the wage differences are in our society — not only because they are upside down. At the 1980 Conference, nearly everyone who was there was earning twice or three or four times as much as the average worker. They were being paid that kind of money to exercise their undoubted intellectual ability on the most exciting educational and social challenges of the 20th century, whilst the workers went about their task of keeping the country working — on the railways, factories, garbage system, cleaning brigades — for a much lower reward and often in dull and dirty routine jobs.

In the 21st century, our wage-fixing system is working towards a scheme which ensures that the kind of work which formerly was the lowest paid becomes the most highly paid. In the year 2005, we have reached the half-way mark where the differential between worker and professional is no more than 1 to 2 (not 1 to 4 or 8 as it was in the 1980s). This new wage-fixing process has knocked to pieces the inequality of educational opportunity, especially in the western and northern suburbs of Melbourne and Sydney. Their residents are now beginning to exercise the power which comes with access to resources. The people of St Albans have just about persuaded the government to establish the next multicampus university in St Albans, with two new chairs: community languages and Australasian studies. It will be the first in the western suburbs in 150 years of state education.

Research

One final comment — one of the most depressing aspects of the 1980 Conference was the revelation of how much research in Australia was linking its fortunes to the politics of governments and education planners. You will not believe it, my young friends, but the ACER was actually an architect and implementer of the now discredited Australian Studies in Student Performance. Fortunately, the combination of an Australia-wide parent-teacher boycott of this kind of testing and public criticism from some leading academics like Dr Malcolm Skilbeck and Professor Peter Fensham eventually scuttled the program. Pressure from educationists in both systems also eventually stopped the ACER from sponsoring projects which provided ammunition for attacks on the public system of education rather than data to improve teaching and learning in all schools, regardless of the system from which they came.

Of course, talk about a separate public and private system of education in the 1980s must seem strange to young people, now that increased public funding of private schools, increased devolution in public schools, and Don Aitkin's long-awaited mechanism for portable superannuation have combined to create one public education system, accommodating a diversity of schools — each school with its own autonomous governing body and practising accountability to the wider local and regional community.

From dissatisfaction expressed with the state of research in Australia at the 1980 Conference, research in Australia took a leap forward. Both political parties adopted on their platforms support for an Education Policy Research Institute as an independent statutory authority with a basic annual grant (as distinct from project dependants) and a governing body representative of all interests — researchers, planners, teachers, parents, students, unions, and employers. In 2005, our Education Policy Research Institute enjoys a high standing in our community. It analyses alternatives for public policy-making bodies in major areas of education with national or interstate implications, and undertakes research which helps to predict outcomes caused by various alternative policies. It also helps the community and the planners to understand better how decisions are made in education, including the importance of interaction of networks and social movements in policy matters. Its work has gone a long way to meeting Jean Blackburn's request that academics emerge from their protected species position of criticizing what is, and assist with the analyses of what has been and what could be.

Faith

I conclude with the conviction that the value which you have placed on yourselves in organizing a Youth Assembly on 'Societal Change and its Impact on Education' is proof that our education system took the right turn at the end of the eighties. It became an essential part of developing a social system which asserts that the fundamental ingredient of being a human being is the right to direct involvement in the decision-making process which affects the individual's world of work, leisure, politics, and education — in Jean Blackburn's words, a system which encourages each individual to exercise 'power over circumstances'.

At the same time, we have begun to learn the lesson which has formed the basis of Aboriginal education for centuries:

> Aboriginal education aims at preparing a person to function effectively in a society which does not emphasize material values, but those community values of responsibilities and obligations which are an important part of an extended family group. (NAEC, 1980)

We have begun to replace the competitive ethic of the 20th century with the co-operative ethic of the 21st century. We have begun to build a society which,

> in place of ruthless self-assertion, demands self-restraint; in place of thrusting aside or treading down all competitors, it requires that the individual shall not merely respect but shall help his fellows; its influence is directed, not so much to the survival of the fittest, as to the fitting of as many as possible to survive. (Bibby, 1967:173)

I leave the continuing task of building in your safe hands.

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8

Societal Change and Its Impact on Education: A Reaction to the Background Papers

P.W.D. Matthews

One of the societal changes which seems to have appeared in Australia (and in other western industrialized countries) is a general falling off of confidence, and an increase in the sense of confusion created by apparently contradictory events — the concurrence of inflation and unemployment, uncertainties in education policies while stress is being laid on the importance of rational response to change, restraints on job mobility when the economy is in the process of restructuring, exhortations to work harder and produce more when the media is sensationalizing the silicon chip and micro-processor as the path to increased leisure. Many other examples can be provided.

This confusion and contradiction is clearly due to the rate of that societal change which is the subject of this conference, and the inability of our traditional institutions to cope. Not surprisingly, this confusion is accompanied by lack of confidence in the future — not of the nuclear cataclysm kind of the 1950s, but a long-term inability to cope. This in itself might be considered a societal change, as well as a resultant change. As some of the writers of background papers indicate, education has already felt the impact of this change through criticism that it has failed both to solve traditional problems (e.g. inequality) and to give us the capacity to face the future. The aim of making education some kind of preparation for life has been with us for some time. However 'life', particularly in the case of schooling, has usually been limited in definition to tertiary education or work. Neither of these alternatives appears particularly attractive or available at present. Thus we are faced with a confusion — what is it that education is for? In many respects, it seems to me that education cannot be expected to answer this question, certainly not in isolation — it has to be answered by the society in which we live. Again, the current state of confusion and lack of confidence in the future bedevils

practical discussion about a future for Australia's education system. Not that one can expect to forecast the future — but at any time our major institutions have to make decisions or adopt assumptions that run into the future, and those assumptions normally have a certain coherence. At present, we seem to be lacking either decisions or coherence of assumptions upon which educationalists and others can gauge the expectations and ambitions of the community.

One of the more common factors amongst the background papers seems to be an assumption or forecast of the growth of education for adults. In the past, education has generally meant schooling or, at its widest, schooling and formal tertiary education. Even though now one of the administrative sectors of education includes the term 'further education', the formal study of the subject of education is still very much concerned with the provision of education for those in the schooling system. Yet, for a whole series of reasons which are set out or implied throughout the background papers, there has been an increasingly extensive growth in the provision for education for adults. (There are some problems with terminology in discussing this area. The use of the terms, 'adult education', 'continuing education', 'further education', to mean the various activities in formal and informal education both credit and non-credit makes discussion very difficult. I shall continue to refer to 'education for adults', by which I mean the provision of all forms of education for adults, defining adults as all those who have left school without proceeding directly to tertiary studies.)

It it is true that education for adults will expand rapidly in the 1980s, it is worth looking both at the reasons for this and at the implications, some of which, of course, relate to the provision of education, and others of which will affect other social institutions. It will be easier to deal with these in a number of separate points, since their inter-relationships are often too complex to set out fully in a short comment:

1 The shorter working life will increase access to education and presumably the demand for it. The form of shortening — weekly hours, yearly periods, increases in various forms of leave — will be important. Will the method of shortening be related to education (e.g. educational leave)?
2 Changes in technology, leading to changes in job or career for many people, increases the need for educational facilities, and access to them. We already have clear examples of the failure to match training and employment opportunities.
3 Forecasts of continuing high levels of unemployment may create new access to education. This depends very much on how unemployment is 'organized'. If unemployment is to be deliberately concentrated amongst school leavers, then there will be a particular kind of need. On the other hand, if certain people are to be encouraged to accept unemployment later in life in order to make way for school leavers,

other forms of educational provision will be required.

4 There has been talk of encouraging people to accept alternative life styles, including schemes of self-sufficiency or small peasant-type businesses. If this is a genuine alternative, there will need to be considerable educational provision made available. While there has been a good deal of publication in this area to date, access to forms of training and education is currently very limited.

5 There appears to be a large bank-up of school leavers who, within the next few years, will have been away from education for a number of years and also out of work. Unless these people are to become outcasts, some form of training and education is probably going to be required to enable them to 'get back' into society in a way acceptable to them and to society. Whether or not this is a continuing long-term need will depend on employment policies generally.

6 There is still a quite substantial need for remedial education amongst adults. As one of the background papers notes, in spite of an increase in expenditure in the schooling area and deliberate attempts to assist disadvantaged children, there is still a substantial remedial need amongst adults. This is an area in which some adult education institutions are working very effectively.

7 The entry and re-entry of women into the workforce is likely to go on growing and indeed it is quite possible that the same phenomenon (i.e. re-entry after unemployment or home duties) may start to occur amongst men.

8 The growing commitment by society to the desirability of participation in decision making in all aspects of life increases the demand for a wide variety of educational services. Employee participation in industry is only one aspect of this, which clearly extends to a wide spectrum of local and national issues from tree lopping to uranium mining. Without the widest access to continuing educational services, this commitment has little significance.

9 Many of the recently recognized fields of education specifically relate to adults. Trade union education, management education, nursing education, teacher education are just a few of these. There is no doubt that these are going to grow, both because work is going to change in nature and content on the one hand, and because non-work time and activities are going to be more extensive. The demands on these and related areas are more specific in purpose, content, and form than traditional educational institutions normally provide. The areas of education well illustrate the point that we cannot meet needs by further loading the traditional schooling system with more time and more syllabus. The needs of many only emerge in adulthood, and emerge during employment (and often because of it, although not necessarily so). In many important instances, it would be true to say that however much we improve the traditional schooling/tertiary system, the greatest

'community good' in the next 10 years would come from a substantial extension of educational provision for adults.

What flows from the above comments will present a challenge to the organization and administration of Australia's education system. On a number of occasions, the Australian Association of Adult Education has expressed the view that some new forms of co-ordination may be required because of the number of established bodies in the formal education field which in the past have had only a marginal concern for education for adults.

The background papers note the somewhat artificial differences between the universities and CAEs on the one hand, and CAEs and TAFE institutions on the other. Perhaps the more one is involved with adults, the less meaningful those old divisions (which were primarily distinguishing between schooling and universities) may seem. Some CAEs find themselves restricted in looking at adult needs because of administrative restrictions relating to the use of funding and staffing. There is also some criticism of TAFE for still being too rigid, because of characteristics inherited from school-based state education systems.

It has also been noted in the background papers and elsewhere that there is a growing number of adults at formal tertiary institutions, particularly women. One of the factors that affect this situation is the access of adults to these institutions. This includes factors which the institutions themselves control to some degree, such as the form and nature of their offerings; but work arrangements, employment patterns, and government policies will also influence the situation.

Although some of the background papers warn against linking education too closely to economic objectives, quite clearly much in this area is going to depend upon the development (or not) of manpower policies, primarily established by governments in consultation with employers and trade unions. While some commentators have emphasized the problems of forecasting manpower needs and the time required to adjust training and education systems, there is little doubt not only that the development of such policies is the best we can go, however deficient, but also that without them we lack credibility.

Accusations of Luddism directed towards those who express fears about technological change must have a hollow ring if efforts are not made to devise appropriate manpower and other related policies. The current shortage of some skilled tradesmen amidst high unemployment suggests we have a long way to go. Indeed, it may prove to be the case that lack of such policies will do more to retard economic development than will straightforward resistance to technological change. In this respect, educational planners (in the broadest sense) have a very considerable responsibility. If any of the forecasts made in the background papers are anywhere near correct about the future, manpower policies and consultations between governments, employers, and unions in the area of manpower,

education and training, and mobility will be important. The new Bureau of Manpower Research recently formed within the Department of Employment and Youth Affairs may assist this process, although figures are not the only equipment that is lacking.

9

Societal Change and Its Impact on Education: Reactant Paper

Brian W. Scott

Introduction

In 50 short years, society has fundamentally changed education in Australia, and education has fundamentally changed Australian society. Society has had to adjust to a great depression, two world wars, two regional wars, large-scale industrial development, a massive wave of immigration, major rural restructuring, a period of protest and turbulence from the late sixties to the mid-seventies and, most recently, the dour consequences of economic restraint and stagnation.

Meantime education has moved from its sparse classrooms and its 'university-for-the-elite' perspectives of the 1930s, to the vast 'education-for-the-masses' of today. As Professor Crittenden's analysis dramatically demonstrates, we now have a population which in the last 30 years or so has seen a six-fold increase in the number of university students. In that time, education was perhaps the fastest growing industry in the country. But as Professor Aitkin rightly points out: 'It was a remarkable run, but it would have been unreasonable to want to see it go on for ever'. In such historical circumstances, it is not surprising to find that there is some strong resentment in education today against the strictures and the dislocations which have been foisted upon it.

Indeed, both society and education, after having influenced each other enormously during these last 50 years, are now under mounting pressure. All four background papers, in one way or another, recognize a rising degree of alienation and resentment between the two. Society — the newly mass-educated society — is exercising its acquired facility for critical evaluation, and is asking some penetrating questions about education and educators. It wants to know whether the fundamentals of education are being properly taught. It wants to know whether sufficient attention is being given to vocational preparation. It expects that education should be

subject to the same kind of cost-effectiveness analysis required of other groups in society. And it is unhappy at what it perceives to be an excessive degree of elitism among academics.

All of these are weighty questions for education in 1980. It could well be said that this fiftieth year of the Australian Council for Educational Research also marks a watershed for a new and quite difficult phase of reassessment and readjustment, for the picture which emerges from the background papers, as I interpret them, is one of a vast industry, used to growth, used to uncritical acceptance of its importance, used to setting its own standards, now finding itself challenged on all fronts — and not enjoying the experience.

There is a real danger, I submit, that education may react with hostility against these trends. However, to adopt this approach is to ignore the reality of the societal changes which are upon us. Education needs to take some deep breaths in the relatively chill air of today's environment. It needs to take some medication, too, just as some industries, government, and community groups have had to do.

There are plenty of fertile ideas and concepts to consider in the four background papers under consideration, written as they are by some of the foremost educators in the country. In my comments, I want to take some of these ideas and examine them in the context of a management perspective. Education is the largest industry in the country and, as such, should not be 'above the battle', nor cocooned from it. By applying a management planning approach, new opportunities can be opened up, new conceptions about the role and responsibilities of education in the emergent post-industrial society explored. This, I hope, will also help prepare education to meet the technological challenge of the micro-processor, which I believe has been underestimated overall in the background papers. But more of that later.

A Strategy for Education

There are various references in the background papers to issues of basic purpose and direction in education. I will cite just two examples. Professor Crittenden observes that the matters which really need urgent attention in today's conditions are 'the guiding assumptions about the nature of education and the role of various institutions and practices in achieving educational objectives'. Again, Mrs Blackburn writes:

> Over the eighties, we need to move to a new view of compulsory schooling, regarding it as a continuously conceived basic phase in its own right, unassociated with selection for post-compulsory options. We should frankly accept that compulsory schooling is largely a substitute for the informal ways in which young people in pre-industrial societies located themselves in society and culture and came to understand and participate in adult activities.

These kinds of issues have to be faced in today's 'age of discontinuity',

an age in which major changes result in sharp discontinuous breaks from past behaviour, forcing us to re-examine our basic mission and purpose — in short, to re-examine our strategy — a military concept which, over the past 20 years, has become much used in business organizations. Top management is increasingly concerned to develop fuller understanding and insight into the real nature, purpose, and contribution of their business, the better to assess its direction.

I believe that the development of an explicit and systematic approach to strategic planning in business has been perhaps the most significant management advance of the last generation. Its application to the 'education industry' would appear overdue. Many businesses have changed their strategies and enlarged their thinking as a result of better insight into the nature of their business. Thus some typewriter companies saw that they were part of the office equipment business, and recognized themselves as equipped to take a central role in the fast-growing computer industry; while others simply remained typewriter companies and did not progress. Similarly some textile manufacturers moved into the chemical industry and capitalized on the growth of synthetics in apparel manufacture; while others remained in the static end of the market, there to face increasing competitive pressures.

A most relevant example to cite in relation to education today is the motion picture industry. By the late 1930s, television was technologically proved and was available for commercial development immediately after World War II. The movie companies, however, were not interested in taking an active part in its development. They had not only production facilities, but also investments in picture theatres throughout the US and in some cases overseas. The companies continued to think of their industry as 'the movies', and their managements discouraged any change in the status quo. Now if we stop to consider the situation with the advantage of 20:20 hindsight, it is clear that these motion picture companies were extremely well equipped to enter the new television industry. They had money, skills, and resources which companies starting from scratch did not have. Thus they had production facilities far greater than any other corporation in existence. They had a great accumulation of copyright literary property. They had, in some instances, great stockpiles of documentary films. And by no means least, they had a great many skilled people gathered under their roofs: directors, writers, film editors, cameramen, animators, publicity men, and actors and actresses. Despite all this, the motion picture company managements failed to see television as anything but a threat, consistent with the nature of their established business.

What were the consequences? Professor Theodore Levitt of the Harvard Business School put it trenchantly:

> Hollywood barely escaped being totally ravished by television. Actually, all the established film companies went through drastic reorganisations. Some simply disappeared. All of them got into trouble not because of TV's inroads

> but because of their own myopias . . . Hollywood defined its business incorrectly. It thought it was in the movie business when it was actually in the entertainment business. 'Movies' implied a specific limited product. This produced a fatuous contentment which from the beginning led producers to see TV as a threat. Hollywood scorned and rejected TV when it should have welcomed it as an opportunity — an opportunity to expand the entertainment business.

The education industry today faces a similar challenge. It can opt for remaining 'traditional', maintaining the facilities, structure, and approach of today. Modifications and improvements may be introduced over time, but essentially it will opt for the status quo (and, in the process, continue to grumble about society's unwillingness to increase funding for education in any substantial way).

The other option is to recognize that a new conception of the role of education in tomorrow's society represents an exciting challenge. The new 'relevant-to-society' education can take account of some of the proposals and ideas propounded in the background papers. A strategic assessment along the latter lines of relevant-to-society education might include the following issues.

The Skills Required in Compulsory Education

Mrs Blackburn's views in this regard are exceptionally germane:

> If we want young people to be able to cope with the kind of society we now have, and with a future already in important respects unlike the recent past, we need to place more emphasis on the basic skills of resourcefulness, co-operativeness, problem solving, and independence, as well as those of literacy, numeracy, and calculation.

And:

> We need the kind of teaching and learning which extends people's power to identify and tackle their own problems, both individually and collectively.

And, again:

> We should . . . take co-operative competence more seriously in schools as a means of assisting individuals to appreciate the strength which comes from associating with others in purposeful activity, as a means of learning how to build links with new people, and because the issues facing us as a society require commitment to more than self.

Traditional education is under pressure from society on several counts: for not placing enough stress on basic three Rs learning; for not preparing students for employment; and, generally, for not being relevant enough. Despite some notable changes in curricula, especially at secondary level, Professor Crittenden observes:

> . . . it would be a mistake to suppose that most schools, or even a majority, have been eagerly engaged in redesigning their educational programs.

In sum, the situation seems to require schooling — again to quote Mrs Blackburn:

which has greater reality in terms of life in the society as students experience it in growing up and as they will experience it after they leave school.

The Ethnic Challenge

Given the trend noted by Professor Aitkin — that the goal of integration is being modified to a degree by a multicultural alternative — we can expect that Australia's migrant population (now as Sir Bruce Williams points out, about one-third of the total population) will want more changes in schooling patterns. I think Professor Aitkin is also right to observe that ethnic politics will develop in the years ahead, and one important area of focus will be education. The fundamental questions of the balance between consensus and pluralism (particularly as they affect education) are, as Professor Crittenden observes, far from resolved, and need to be taken into account in any strategic approach to education.

Lifelong Education

Several of the papers refer to the changes already with us in terms of re-training, mature-age education, and, by inference, the need to consider education in the context of a total lifetime. Professor Crittenden recommends the provision of 'a variety of formal and informal agencies of systematic general education to which people would have access throughout their adult life'.

Professor Aitkin makes the same point when he notes that perhaps the 18-year-old 'will finally become the atypical university student', and goes on to infer that the role of schools, colleges, and universities ought to change 'to allow people to drop back into formal education for a time'. At the moment, the options to re-enter school or to take up courses of special interest would seem to be (as Mrs Blackburn implies) much more restrictive than is desirable. Re-structuring at tertiary education level, including establishment of 'multilevel and multipurpose institutions', seems to be the sensible answer. But undoubtedly, such proposals would meet with strong opposition from many in education. Professor Aitkin made this point wryly, with what I sensed was insider knowledge. Yet, if education is to be 'relevant to society', rather than accountable only to itself, it must consider these sorts of issues very seriously in its strategic perspective.

Education and Work

The suggestion that the education system is partly responsible for today's level of unemployment brings concern, and at times defensiveness, in several of the background papers.

My own view is that the main reasons for Australia's unemployment today are economic and political rather than educational; though I do think that education as a whole became (like much of the rest of our

society) rather cavalier about vocational issues during the 1960s and early 1970s. My experience tells me that Mrs Blackburn is right when she says:

> There is a remarkable absence in the whole school curriculum of the study of work as a major human activity. Students gain little assistance in understanding the effects of technological change, why different kinds of work command different rewards and are performed under different conditions, why some important work like child-rearing is unpaid, what the role of trade unions is, how major investment decisions affecting the availability and nature of work are made.

In addition, the nature of work itself is changing. Education has a very important role to play not only in helping to mitigate the unemployment problem, but also in meeting the new and different concepts of work.

The word 'unemployment', I am told, dates only from late Victorian times. As a concept, Trevor Owen has observed, 'it draws all its heavy moral overtones from the values of that period'. Owen, an English businessman, stresses the need to move from our existing 'work ethic' to a 'contribution ethic'. The key question in assessing an individual's worth, he says, would be not 'What do you do?' but 'What are you contributing?'.

Changing the values of society to the point at which unemployment becomes a non-problem (and the very word 'unemployment' disappears into obscurity) will, of course, take a very long time. But this sort of conceptual exploration will, I expect, continue to take place with growing frequency in the 1980s: and it is the sort of discussion with which education needs to be attuned.

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In the meantime, education should be actively pursuing proposals like Professor Karmel's for a comprehensive policy of youth. It should be exploring, with business and with trade unions, the establishment of programs to develop needed and relevant skills among youth who would otherwise be unemployed. It should be gearing its programs — and its programming — to the vastly increased part-time work patterns of about 20 per cent of the total workforce. Furthermore, those responsible for secondary school education should at once institute market research studies, to learn what happens to students after they leave school. If Mrs Blackburn is correct (and I suspect she might be) in saying that 'almost none seek feedback from ex-students', then this is a serious indictment of the present approach.

In summary, a strategic assessment of educational requirements can encompass many significant issues in today's rapidly-changing society. Education could opt for the status quo, just as the motion picture companies did. Or it could see its role enlarging and changing, and seek to adapt and prepare for the needs of a 'relevant-to-society' form of education. This is what I hope it will do.

Financial and Administrative 'Good Order'

Institutional education could be said to have a 'public relations problem'. The 'establishment' holds that the fundamentals of education have in recent years been ignored; that there is too much anti-society teaching: that there is insufficient discipline in schools; etc. Others argue that education does not do enough for students in preparation for a vocation, and is not concerned enough about the problem of unemployment.

There is the criticism of education's 'lack of financial responsibility' and the perceived 'elitism' by some in education; and the word 'academic' almost becomes a pejorative term in the society outside. However unfair the criticisms may be, they will not go away without the issue being properly addressed.

Education needs to recognize that most people have felt the recent economic pinch in some form or another. Jobs have been at risk; wage increases have scarcely kept pace with inflation; and a good deal of rationalizing and restructuring has been needed in many sections of the country.

It is understandable that many people in the community feel education has not come to terms with such matters.

(i) A view persists that education became a 'free spender' in its period of rapid expansion, and that it still is able to get allocations of money without much difficulty.

(ii) Some academics tend to be viewed as elitist — unwilling to consider reforms for themselves, though very vocal in calling for changes in relation to others. The fact that some prefer to concentrate on research and extracurricular activities, rather than to teach, is also criticized.

(iii) The tenure system is seen as unreasonably protective, and as effectively blocking the injection of new ideas into the system.

(iv) Overall there is a view that, in educational administration, there is an unwillingness to apply cost-effectiveness techniques and budgetary disciplines on educational activities.

I believe that education would help itself — and its roles and relationships in society today — if it pursued policies of financial and administrative control with more diligence and commitment. Indeed the whole community services sector needs to be making the same commitment to management efficiency and effectiveness as other sectors. As Professor Aitkin states:

> There is widespread political feeling that schools, universities, and colleges should be more accountable, given that they are now such a major source of government expenditure.

Education does have complex professional management requirements. Some of these relate to efficiency: such as financial controls, scheduling, purchasing, inventory control, distribution, maintenance, computerization, records management, communications, personnel records, and the

like. Others relate to effectiveness, particularly in relation to changing needs and changing economic factors: facilities planning, rationalization of services, feasibility and cost-benefit studies, restructuring, etc.

None of this should imply that a good deal is not being done. Some major educational institutions have made a great deal of progress during recent years. However it is very likely that much more can be done, and that the criticisms of attitude can be muted by a conscientious broadly-based response.

Issues of Technological Change

We see in Australia today evidence of growing societal disruption of the kind that has traditionally accompanied significant technological change. In such circumstances, the relevance of traditional education in an age of rapid mechanization and computerization will rightly be questioned.

The great central thrust of the new technology is the micro-processor. Its enormous ramifications are just now being recognized in commerce and industry, but it has barely touched education. In the classroom, the only major indication so far is in the use of basic calculators for mathematics. In addition, an impressive range of other technology already exists for massive changes in learning techniques — desk-top information retrieval units which interact with the student, sophisticated mini- and micro-computers for quick problem solving, reticulated television, video discs, and even communications satellites. All these and more will bring many changes into education within the next decade. There will be hundreds of PhD theses on aspects of the silicon chip's impact on education between now and the end of the century.

Computer-based education is already here. While the PLATO program in the United States is perhaps the most outstanding example of effectiveness in operation, there are already 500 computers in schools in Australia, and we are said to be ahead of Europe in this regard. This is encouraging evidence of commitment to some application of technology in schools, although there seems to be some lack of direction about its uses. Within 10 years, computers in schools will be the norm, and they will be widely used as a tool for problem solving, not just for mathematics and remedial teaching.

In my view, the new technology of the micro-processor and mini-computer represents an enormous opportunity for modern education. It is vital, however, that we move at once on the major planning tasks. If we fail to plan now, technology will overtake traditional education, making it less and less relevant. Special attention might be given to the following subjects in particular.

Teacher Training

The oversupply of teachers, according to Sir Bruce Williams's projections, will get worse before it gets better. While this may be bad news in

some ways, in terms of adjusting to technology change, it provides us with a source of skilled manpower which can readily be tapped for training not only in the use of new technology but in a much broader range of life skills. In addition, teacher trainees should be provided with basic instruction in the use of micro-processors and a good percentage given access to more sophisticated equipment.

The Role of the Teacher

Professor Crittenden refers in his paper to our lack as a society of a sufficiently coherent common basic and moral philosophy. Much of the reason for this, I venture to say, is a narrowness of vision about the role of the teacher. Technology can help to correct this shortcoming, if we plan effectively. Teachers in the post-industrial age can then become more important than ever as 'architects of society'. Freed by micro-processors and mini-computers from the basic instructional tasks, they will have time to help students learn about themselves and their environment, about the requirements for healthy living, the basics of value formation, behaviour motivation, about politics (as Professor Aitkin suggests), and about work (a topic which, as Mrs Blackburn points out, is barely touched on).

Manpower Planning

Under the current system, immediate educational responses to changing manpower requirements are difficult and sometimes impossible because of the lead times involved — somewhere between 10 to 12 years. The inflexibility is aggravated by the dearth of available statistics. The National Centre for Research and Development recommended by the Williams Committee would, if established, go a long way towards meeting this need for manpower monitoring. But even so, as technology change gathers pace, the problems of manpower planning will become more acute. It is now well recognized, for instance, that the worst problems in manpower planning occur in highly specialized professions — not, as is often alleged, in arts, law, and economics.

How can new technology help? To start with, statistical monitoring will be transformed. But perhaps more important, developments in communications and information technology will allow education, and vocational training and re-training in particular, to adapt much more readily to changes in skill and knowledge requirements.

Lifelong Education

In the long run, schools and colleges will need to become community facilities open 15 hours a week for most of the year. Computer-based education will make this a possibility since it will be far more cost-effective than the current system. There are already examples in the US

where courses are arranged in intense work units of six to eight weeks, so that people going through periods of unemployment or part-time employment can learn new skills or sharpen up on old ones. Further, we still need to be educating people to use their leisure time. Sir Bruce Williams's paper shows that life hours of work have been reduced by over 30 per cent between 1900 and 1980. Some forecasting work has recently concluded that, by the end of the century, most of the population will spend 27 years of their lives *not* working. If so, the demand for education in its broadest sense will be immense.

There is one other major factor to be considered in the context of technology change and education, and that is unemployment. As Mrs Blackburn says: 'Higher school retention beyond compulsory years must be considered as a part of the strategy of attacking high youth unemployment'. But we have to develop the sort of education which entices young people to want to keep on learning. While we cannot expect education alone to solve the unemployment problem, it can be a major factor in its alleviation.

Technological change can be an important catalyst in resolving the situation. By using micro-processors and interactive terminals, it will be possible for unemployed people to undertake intensive courses which will allow them to meet skill demands almost immediately. Further, as new technology and more leisure time have impact on our lives, the unemployment stigma will hopefully fade and we may see more people move in and out of the w workforce periodically.

Finally, the rate and impact of innovation in the new technology is now so great throughout the western world that, rather than hoping for government to slow down its introduction in education (for fear of some short-term disruption and discomfort), educators would be much better advised to press for greater commitment to its application, both in terms of funding and facilities. New communication and information technology is not just a cause of change; it can be a stunningly effective weapon for its accommodation. It has the potential to speed up the process of learning to a fantastic degree, vastly changing the investments in time and money required today. It is the most potent weapon at our disposal to allow education to break out of the economic straitjacket in which it currently finds itself.

Conclusion

Alfred North Whitehead summed up the issue many years ago when he declared: 'There is but one subject in education, and that is life in all its manifestations'. People today are looking for relevance to life in everything, but particularly in education. Unfortunately, relevance has been and still is scorned by some educators. Perhaps they take too narrow a view of relevance, equating it with an essentially utilitarian concept of

education. This is a pity, because I believe students want far more than just qualifications — they want to break away from 'credentialism'. As Mrs Blackburn has noted 'we equip people with qualifications for work without giving them the opportunity to explore the basic concept of work itself, which is surely one of the most important manifestations of life. The same neglect also appears in relation to other fundamental aspects of life, like leisure, nutrition, and interpersonal relationships. No wonder there is so much disillusionment with formal education'.

Education can no longer be elite, independent from the mainstream of life. It must recognize its interdependence, not only with work and employment but with the family, other social structures, and the world at large. This is particularly true in today's era of truly massive technological change when certain groups are likely to be more affected than others. Education can play an important function in ensuring that the benefits of such change accrue not only to the technically competent but are enjoyed by all levels of society.

Sir Bruce Williams in his paper has outlined the important trends underscoring the economic and demographic developments in Australia in the next 20 years. Such changes require response, not after the event when we have lost control and can resort only to trying to mitigate negative effects, but *before* they cause societal disruption. This is the lesson management is learning, and the lesson with which education, too, must grapple.

10

Societal Change and Its Impact on Education: A Reactant's Statement

John R. Steinle

I suppose one should not express surprise to find that the authors of papers delivered at this conference on 'Societal Change and its Impact on Education' should all be eminent social scientists and educators. Happily they have each felt free to range over a number of disciplines outside their own, thereby avoiding the orderly distribution of viewpoints by discipline.

This multidisciplinary approach is wise, as problems in society often fall between disciplines. But is there not a case for introducing at least one scientific or technical voice into the discussion? As Adam Smith said:

> People of the same trade seldom meet together even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.

In this case, things are made to look pretty bleak for education.

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Professor Aitkin acknowledges that the increases in spending on education accompanied substantial improvements in the intellectual quality of Australian life, and he comments, 'our better educated population is more effective politically and more interested in culture'. In spite of this, however, he comments upon education's bad press over the last five years. But when did education have good press? Even Dickens gave it some hard times! I hope he would agree that while we need to take heed of the comments about education in the press, we need also to look carefully at their source of quality. Is it true that *Playboy* now produces a 'Back to School' number?

Furthermore, neither Professor Aitkin nor any of the writers assumes that schooling or education can be firmly guided by structural control. No person or group is invited to pick up education and march it off towards either the rites and rituals of Victorian discipline or the neo-tribalism

envisaged by a few zealots for the counter-culture. They all seem to recognize its complexity and to agree that so many different values and goals for education are professed within education itself and by the general public, that those who would be reassured by more checks and balances might, on closer examination, be frustrated by the very size and diversity of the operation.

Professor Aitkin says that in 'what remains of the 20th century, the continuity of things in Australia will be much more marked than their change . . . Institutions and procedures which are important to education are unlikely to change very much in the remainder of the century'. Our federal system, party system, state education systems, and arbitration system are well established. Party partisanship endures, and Professor Aitkin cites the figures to prove the point.

Bi-partisanship is rare. Education has indeed managed to avoid intensive partisan politics, which is not to say that education is miraculously insulated against political influence. Professor Aitkin claims that educationists, in general, have used the subtleties of consensual decision-making and negotiations to avoid both partisan and bi-partisan politics. The style of state education departments certainly has been non-partisan. Professor Crittenden examines some of the reports on education which have been prepared in the various States and accepted by all parties, and it is noteworthy that these state systems have been particularly free of political interference.

Needless to say, however, the degree of political interest also determines the level of government support, and this relationship explains the increases in spending on education during the recent decade which peaked, receded, and appears to be continuing to fall during the eighties. Depending on one's perspective, action is not always a matter of money consumed. A static economy does not mean a static society nor static schools. There will, however, be some changes.

Divorces will increase, we are told, and more children will be put at risk. There are already strong pressures from parent and teacher organizations for more counselling services in schools to assist these children. We will develop iron ore, coal, gas, uranium, and other mineral resources. This will lead to new schools in areas which are frequently hot and remote, and where schools are expensive to build, to maintain, and to staff. Our present population is well educated, even over-educated some claim. Such parents are unlikely to settle for less education for their children.

Ethnic politics are seen as a hallmark of the 1980s and 1990s. Those pressures are already in evidence; they frequently surface as demands for educational provisions designed to retain and promote cultures through ethnic schools and programs in regular schools. Both are very expensive. The list goes on to include continuing education and portable superannuation and let me add a couple more.

Has anyone estimated the hidden costs of the legislation currently before the federal parliament to introduce copyright legislation? Educational authorities certainly have made an attempt to estimate the cost of replacing the technical and electronic equipment which was bought, in some cases, more than a decade ago and which has in many cases been used for years by students at schools and by adults after hours. As a result, much of it sadly needs replacement. The high cost of this replacement faces both government and non-government schools, which might well be called semi-government schools, for all schools are supported by funds from the parents whose children attend them, as well as by the state and federal governments. They differ in a number of ways, but mainly in the extent to which funds come from these sources. If the cost of schooling continues to rise, less government funds will become available, and parents will necessarily pay more.

Furthermore, as state government schools continue to gain increasing autonomy and greater opportunities for decision making, both in financial control and staff selection, they become increasingly like the independent schools. Indeed, it is already difficult to separate state schools from schools in the large Catholic systems which are bigger than the government systems in the smaller States. Furthermore, the amounts of money collected in state schools is not much different from the average amount collected in many Catholic primary schools. The result may be that these Catholic schools, together with Queensland grammar schools, provide models for the future, with the principal or the school board, which comprises parents, teachers, and in some cases students, managing the financial and educational affairs of the school within budgets which may be wholly or partly determined by a central or regional authority and paid as gross allocations or single grants. Such a change may mean substantial changes to the manner in which education is administered in this country.

II

Mrs Blackburn, who worked with Professor Karmel on *Education in South Australia,* has first-hand knowledge of the enthusiasm and confidence that was generated during the heady days of the seventies. Now, in a contracted economy, a move towards enlisting education in the service of the economy is being called for by the public. How responsive should we be? Close adherence to those demands 'could be disastrous', says Mrs Blackburn.

Professor Aitkin's paper tells us basically what 'could be'. Mrs Blackburn's, by contrast, tells us what 'should be', and it is necessarily more moralistic and generalized. 'There is no necessary connection between any social changes and an appropriate educational response', states Mrs Blackburn. In particular, there is not a direct connection between the disposition of the public and the response of education. What imperatives and guides are then available to educational managers? Certainly Mrs

Blackburn, the educational planner, is unwilling to accept falling student numbers as a justification for reduced educational funding. She calls that reasoning a 'pretext' rather than a justification.

The real justification derives from conceptions of the common good which are founded upon liberty, equality, and community and which, in turn, rest on a still more fundamental philosophical assumption that man, singly and collectively, is an infinitely perfectable creature. If wealth, status, influence, and affection are seen as prizes in a competition, which is a common enough conception, then there must be winners as well as losers. Mrs Blackburn compels us to attend to the losers, as well as to the competition itself. She states that 15 per cent of students in non-Catholic, non-government schools do *not* continue to Year 12. In some areas, only 10 per cent of students in government schools *do* in fact continue to Year 12. In some places, almost everyone is a loser.

Blocked career paths, as in teaching at present, call for support of a multi-occupational work life and satisfactions other than promotion. Cultural diversity is threatened, if not vanquished. Changing moves strain traditional relationships. 'The level of individual breakdown is rising.' Competent apprentices carrying out complex technical services can stigmatize themselves with a label, often acquired in school, that they are 'not clever'. Ethnicity, in the eyes of some teachers, seem to be associated with limited capacity, resulting in low teacher expectations, and becomes a cultural disadvantage. Sex, too, is a source of disadvantage. Others are disadvantaged by credentials escalation. Their ability is overlooked in favour of those with the recognized, but occupationally superfluous, piece of paper. There are plenty of losers.

These problems, with few exceptions, are very old problems: lack of participation in the full range of public schooling, disadvantage in academic competitions, ethnic and sex role stereotyping and stigmatizing through schooling that contributes to the reproduction of social inequality.

Complacency, in the wake of the increase in educational expenditure even in the event that the current level is maintained, is unwarranted. By international standards, says Mrs Blackburn, Australia is neither over-spending nor over-educating. She is less concerned with problems of growth than she is with problems of distribution. Mrs Blackburn does not even bother to question whether free education is desirable or available. Perhaps she should. She assumes, as do most people in most developed countries, that there should be minimal or no cost to parents of students in state and independent schools for books and learning materials.

We all know that the growing cost to parents in state schools has become a matter of public discussion in Great Britain, and that it has warranted headlines and an editorial in the *Times Educational Supplement*. But how free is free education in this country? In South Australia, for example, government support for schools for items which are otherwise purchased by parents or by funds contributed by them has been falling in

both real and dollar terms since 1975–76. Indeed, in a sample of secondary schools, the fall in real terms from 1975–76 to 1978–79 ranged from 32 per cent to 50 per cent. Provisions for expenditure in 1979–80 arrested the rate of decline but nonetheless school support still dropped further to a range of 34 per cent to 48 per cent. This decrease, I hasten to add, has taken place in spite of increases in funding for education *in toto*. The problem results from the inflation of fixed costs which have necessarily resulted in money being drawn away from expenditure on items directly associated with the teaching-learning process. Obviously, the short fall has been met by allowing programs to wind down or by seeking increased financial contributions from parents, or by both. The most unpalatable aspect of this haphazard approach to funding is that the quality of education offered by state schools increasingly depends upon the prosperity of the school neighbourhood. There are those who argue that increased financial commitment will lead to increased parental participation in the life of schools, because people value what they pay for directly. This may please those who are concerned with the alienation of both students and parents.

Nobody in this country has a better grasp of the problem nor a clearer perception of the courses open to those who work in schools to attack the disadvantages that some students suffer than Mrs Blackburn. In practice, however, her solutions have been seen as too complicated. How is her idea of a 'minimal core' related to an 'optional' content? Might not such a minimal core have to be so broadly stated that it becomes neither minimal or core? And just who is to decide the limits of optional? Is it possible to have no limits on options whatsoever? Should all schools provide all options?

Independence, suggests Erik Ericson, derives from a sense of trust, and confident dependence. How much independence can be given to pupils in classrooms or, more precisely, how much independence do you let them take? There is no single answer to that question. It all depends upon your point of view. I suspect that there is a great need, an intensely personal and psychological need, for a sense of control, whether it is over paint, numbers, or a welding torch. Independence and co-operation have roots in trust and in the sense of control. We can easily delude ourselves into believing that a dabbling pupil is having a creative and productive experience. The pupil, however, is not fooled. He knows, by comparison with others, that he has relatively no control of the medium. When a pupil needs help, we do not solve his problem by philosophic equivocation.

Over the last decade, some important changes have taken place in the structure of education. The changed role of inspectors, the reduced influence of public examinations, the trend towards comprehensive schooling and regionalization, among other changes, have helped increase the flexibility and responsiveness of schools. This has resulted in greater diversity in accordance with local wants and resources, and it has pro-

vided managers with a more comprehensive view of problems and solutions than could be drawn from a monolithic structure. Organization-wide shifts in policy are less often necessary because issues can be localized. But these changes have been at a cost. Public proof of system efficiency is difficult. It would also be difficult to obtain complete uniformity and close co-ordination between schools even if we decided that they are so important that we should once again give them top priority. It is also difficult to control fads without crushing true creativity.

We need to find better ways of identifying schools that are doing a good job, of supporting them, and of assisting others to learn from them. We also need to encourage and support innovation without endorsing quackery and window-dressing. We need independent evaluators who are highly skilled and tactful. Good programs, like some good wines, do not always travel well. Tricked-up bubbly is always portable, even if it is not potable.

We are exhorted to pay particular attention to the two post-compulsory years which are considered to be the most crucial in the whole educational system. The high degree of specialization that begins for some students in Year 11, and can continue through to the post-doctoral level, is well established in Australia. The idea of a balanced special and *general* education, as advocated by Whitehead in his *Aims of Education* and advocated here by Mrs Blackburn, is not a new idea. I doubt that those ideas, for a post-compulsory two years, can be easily grafted onto existing structures — the colleges of advanced education, TAFE, or the universities, although all those structures could profitably consider broadening the bases of their curricula.

Mrs Blackburn's prescription resembles what is being done in some of the better Canadian institutes of applied arts and technology, some British polytechnics, and the better community colleges in the United States of America. Units earned are accepted for accreditation and further study, and the programs are comprehensive. 'Clearly', says Mrs Blackburn, 'the working through of details would be a big task.' As a example of a start on that task, she offers the Canberra colleges, which do not offer technical studies, and the comprehensive community colleges in Tasmania, which combine technical and academic offerings. This innovation might require a new institution that draws staff and facilities from existing units and other community resources. Such multilevel and multipurpose institutions could present problems of second-class citizenship for both staff and students. The principle no less than the details, as Mrs Blackburn admits, would be a big task, but could be undertaken at no great cost. The suggestion warrants our closest attention.

III

Professor Williams is concerned with economic development and educational expenditure that is consistent with that development; but his concerns derive from fundamental political and philosophical convictions. Demography, like economics, meteorology, and other methodologically scientific fields, is inexact when it is forced into predictions. On the very first page, Professor Williams writes, 'The population projection for 2001 will change several times before the end of the century'. Knowing the population of Australia in 2001 to within 500 000 is hardly precise information. But how precise must that be for our purposes? Very roughly, the discrepancy in two estimates for 2001, one made in the First Report of the National Population Enquiry published in 1975, and the other made by the Australian Bureau of Statistics three years later, is 500 000. We can presume that of those 500 000 about 100 000 will be of school age. The total number of teachers required for those children will be about 5000, which is not likely to be a drain on the labour pool at the turn of the century.

So much for the statistics. But what will be the impact upon schools when young people of high calibre turn away from teaching because it offers no real likelihood either of employment or promotion? Examples of factors contributing to unemployment generally are cited: the 'reduction in the proportion of females who leave the labour force after marriage'; a big increase in new entrants to the labour market; increased oil prices and 'failure to maintain a reasonable balance between money flows and goods flows'.

Whatever the causes of unemployment might be, and I suspect that economists will be debating causes and cures for a very long time, the 'invisible hand', to use Adam Smith's term, that guides the so-called free market has been influential in maintaining the existence of an abundance of youth who are greatly disadvantaged even in periods of economic expansion. The benefits of tax-supported education are unequally distributed, and disadvantage, founded in cultural deprivation, seems to be self-perpetuating. Concern with growth, mobility, and profitability can, if we are not wary, keep us from attending to the values of equality and usefulness. 'Economic growth depends on change — most gain, but some suffer in the process.' It is often the same 'some' that do most of the suffering in periods of growth as well as in periods of decline.

How does education fit into the development of the nation? Professor Williams has concentrated his attention on economic development, to which education must be mindful but not subservient. Our answer will be a delicate balance of loyalties and judgment. Certainly, we will be wise to heed Professor Karmel's (1980) warning not to channel more students into narrow vocational courses, whether in secondary school, technical and further education institutions, or universities. Such a move would almost certainly prove to be wrong in the long run.

IV

Professor Crittenden's paper is about 'the purposes and values of Australian education' and it is a fitting extension of Professor Williams's essay. I suspect that he is saying that we tend to confuse what should go on in education with what should go on in schools, and that we need to consider both in relation to what actually does go on in classrooms. He reminds us that the enormous physical growth of educational institutions took place during a time of significant social change marked by increases of immigration, increases in the role of central government, increases in questioning traditionally established authority, increases in support 'for various forms of relativism' which include sexual behaviour, changes in the role of women, a decline in the influence of religion, and an increase in self-centred materialist hedonism. Our public morality is justified by an 'eclectic group' of principles and a lack of 'a sufficiently coherent common basic moral and political philosophy'.

Not all of these changes are bad. Women were discriminated against and the undermining of old sexual obsessions is obviously desirable; but, in general, the changes, and what has followed in their wake, are seen as dangerous to our culture. Few would disagree, and many would argue that our culture has long been suffering from this lack of an agreed philosophy.

Professor Crittenden questions the influence of 'critical theory' on the growth of our educational system. From the 1950 to 1960, most changes in education seemed to have been based on a desire to get out of the straitjacket of highly centralized curricula, rigid administrative practices, and unduly formal teaching. Some changes were based on 'educational grounds'; others, such as raising the leaving age and abolition of fees in government secondary schools, were 'prompted mainly by economic, social, and political considerations'. Raising the leaving age, it was argued, would promote social equality and democracy and provide skilled manpower. In Mrs Blackburn's words, that was a 'convenient myth'. Professor Crittenden then skilfully examines the changes in Australian education since the 1960s, which to some extent were influenced by theoretical positions and which were teased out in a variety of well-known reports. The Karmel Report in South Australia, he finds, did not go far enough, to examining the grounds upon which the schools' distinctive responsibilities should be determined and justified.

The Tasmanian Report of 1977 confuses ends with means. Can knowledge of adolescence assist us to shape the 'nature and aims' of secondary schooling, or is that knowledge 'relevant only to the determination of the most effective means'? His either-or question oversimplifies the matter. *Up to a point* (and the definition of that point may be at the centre of our differences), the aims *and* methods of secondary education must provide concurrent value for the student. That is, they must make sense and be useful to the student in his or her current state of development.

Dissatisfaction with these reports is based on a fear that the 'public disciplined forms of knowledge . . . more generally the intellectual culture' will be diluted, and that we might be wasting our time and money in trying to provide a general education for 'those who after 13 or 14 years of age have no interest even in a watered-down form of general education'. The description of courses as 'watered down' will have about the same effect on some thin educational skins as 'watered-down' acid. The facts are that nobody needs to make a general case for these students attending school. Parents quite properly make that decision for their children. The task of the schools is to respond as effectively and as usefully as they can.

The review of curriculum theory finds this area wanting as well. At issue is the tolerable limit of diversity, where leaving decisions about purposes to 'individual teachers' is seen as 'hardly satisfactory'. The Schools Commission's treatment of curriculum lacks systematic discussion and argument. The Curriculum Development Centre, which attempts a rationale for a core curriculum, 'does not attempt to respond to the objections'. Nobody seems to be getting it right. To do it correctly, to build a common core curriculum of social education, we must first examine 'the state of the underlying consensus within the Australian society'. That is excellent advice. Certainly such consensus is very hard to find, but all of those involved in curriculum development would applaud the suggestion and welcome advice on how to get it. They would also appreciate advice on what to do while awaiting the arrival of consensus. Perhaps the framework prepared by the Curriculum Development Centre will ultimately provide a focus. Certainly its approach appears to be to provide statements of agreed values in Australian schools and encourages school communities to discuss them and to prepare an agreed document for each school.

The final section of the paper draws attention to 'general issues of educational theory and policy' that are now prominent and which will continue to be so. The 'convenient myth' that education can play a leading role in effecting social change is destroyed. What goes on in school, it is agreed, 'must be concerned with education for the broad quality of life and not only for use in the job market'. A powerful coalition will be needed to keep education from becoming a servant of market forces, and it is comforting to realize that Professor Crittenden and some of the reformers who are criticized can find a common policy.

Professor Crittenden again agrees with the reformers when he underscores the importance of the problem of balancing the 'freedom of individual schools and the political responsibility of those who have authority in the system as a whole'. Another general issue likely to retain its prominence is the issue of diversity and equality, even though these values will sometimes conflict.

The paper closes on a plea for more 'systematic work on the theoretical bases of our public policies in education'. It argues vigorously that our

F

theories of education and curriculum often skirt the difficult questions. We may be better practitioners than theoreticians, but I doubt that many would consider that much of an achievement. Most of all, however, I thank Professor Crittenden especially for emphasizing the need to examine the 'underlying consensus within the Australian society'. Perhaps this meeting is part of the answer to my own question about how to go about that examination.

Finally, let me say that I am grateful that, while the papers we are considering all assume that the present emerges from the past, they do not suggest that events are connected in time like so many temporal dominoes. Like the writers, we should all reject the idea of maturational relationships (Nisbett, 1977) between the social facts of the present and theories about the future and the past. Such linkages are stamped upon history by commentators, and even if we have convinced ourselves that we have discerned some trend of historical development from the past into the present, there is not the slightest reason to suppose that such a trend will continue into the future.

Durkheim (1956) applies this notion to education in his comments on 'The evolution and the role of secondary education in France'.

> . . . in order to be able to envisage the future with a minimum or risks, it is not enough to open one's mind to reforming tendencies and to be systematically aware of them.

A new ideal always appears to be in a state of natural antagonism to the old ideal which it aspires to replace, even though in fact it is only a consequence and development. 'And in the course of this antagonism, it is always to be feared that the bygone ideal may disappear completely . . .'

Ironically, Durkheim points to the Renaissance when humanistic education was established and, as a result, the vocational education and the utilitarian education of craftsmen and tradesmen was destroyed.

> It is important that we take all possible precautions in order not to fall again into the same error, and that if, tomorrow, we must end the era of humanities, we may know how to preserve whatever part of it should be retained.

I suspect that our writers all agree.

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II

Contributions From the State Institutes of Educational Research

Introduction

As outlined in the preface to this publication, the State Institutes of Educational Research were actively involved in the invitational conference and its associated activities. The major involvement was the preparation of reaction statements to the conference background papers by Professor Crittenden, Professor Aitkin, Mrs Blackburn, and Sir Bruce Williams.

Each Institute established a working party to examine and debate the issues raised by the four background papers, and produce a substantial reaction statement; these statements were made available to conference participants at the time of the conference, and were an important component of the conference debate.

When considering the content for this publication it was decided that it would not be possible to include the full text of the Institute papers. This decision was reached in order to limit the length of the volume and to avoid some of the duplication which inevitably arose between the various papers.

Following the conference, the Institutes were asked to prepare short statements on themes, raised by the working parties, which did not appear to have been addressed in any of the other papers. The Institutes agreed to this extra request and small groups of members produced the responses which are reproduced in this publication.

New South Wales

Theoretical Foundations for Change in Education

Some Problems of Theory

In his background paper, Crittenden quite justifiably argues a case for a theoretical foundation upon which Australian education might be

developed. He searches for this theoretical foundation, but finds a lack of it in the variety of reports, criticisms, and inquiries into Australian education which have been a feature of educational activity in this country since the Knibbs and Turner inquiry early in the century. Crittenden, concentrating on recent reports, asks the rhetorical question: 'What kind of theory has in fact guided our educational policies and practices during the past 30 years?' He finds a typical answer given by commentators:

> . . . there has been very little guiding theory at all . . . at least of a systematic, carefully developed kind. Most changes are said to betray an attitude of expediency rather than the application of a consistent theory.

It is not difficult to show by analysing the reports of various inquiries that there is a seeming lack of educational theory from which the recommendations follow. Reasons for this may be considered from two points of view: (i) the nature of inquiries; (ii) the nature of educational theory.

Educational Inquiries

Educational inquiries usually arise out of dissatisfaction with an aspect of education. Since the brief handed to the Committee Appointed to Survey Secondary Education in New South Wales was essentially that of surveying the educational scene with respect to the provision of educational opportunities for adolescents, it is not surprising that it contains only 'the embryo of a systematic theory' because it was charged strictly with doing what Crittenden acknowledges: 'recommending changes in the institutional form of the secondary school and the design of its curriculum'. Perhaps that is the nature of educational inquiries. Educational theory is to be found elsewhere.

Educational Theory

The second matter which deserves some attention is the nature of theoretical activity in education. Without embarking into a detailed analysis of educational theory, at least one way of examining theories is to assess their level of concern with: (i) the means of achieving educational objectives; (ii) the basis of establishing educational objectives and educational priorities.

It may be noted that this latter activity is quite different from surveys of educational needs, or surveys of what individuals or institutions believe educational needs or objectives should be sought.

There is not a great deal of difficulty in establishing some sort of theory with respect to the means of education. The literature abounds in practical advice about teaching strategies based upon respectable psychological and sociological theories concerned with learning, development, socialization, group dynamics, leadership behaviour, and so on. But there is a great deal of difficulty in establishing theories from which to derive educational ends, and it seems that this is just the form of inquiry which Crittenden sees as essential:

> But, what really needs more urgent attention in these conditions are the guiding assumptions about the nature of education and the role of various institutions and practices in achieving educational objectives.

Since education has a value dimension, it is most important to come to grips with this value problem. One of the general tenets of value theory is that it is not possible to derive 'ought' from 'is', that is, because something *is* the case, it does not follow that it *ought* to be the case. With respect to educational activity we cannot argue that because we *do* something we *ought* to do it. It follows then that descriptions of what is the case about socialization, learning theory, etc. can only set parameters within which an educational end may be achieved but it cannot determine what that end might be. Yet educational activity without a value orientation would appear to be a contradiction in terms. Value, or as Peters puts it, 'worthwhileness' is an essential ingredient of education — it is part of the logic of 'education'. While we might agree with Crittenden that urgent attention should be given to 'the guiding assumptions about the nature of education', there are some very serious logical and philosophical problems to be negotiated before a general theoretical position can emerge. Crittenden himself points to difficulties of relativism, absolute values seem to be out of fashion, utilitarianism has some of the problems referred to above. Yet some ends are chosen above others. 'Push-pin is not as good as poetry.'

Is there a Feasible Solution?

While there are extremely serious difficulties in establishing a general theory from which to develop educational objectives at least, a practical approach would be to examine:

(a) particular social needs and needs based upon tendencies already existing in the social organization — these may range from the need for more skilled tradesmen to the problems of accommodating declining standards of living;

(b) the role of organized education or schooling in meeting certain existing and possible future needs. From such an examination it is obvious that no general blueprint for educational activity can emerge, but at least some realistic plan of action to meet identified needs could be formulated. For example, it is possible to consider the concept of education with respect to (i) vocational education, (ii) education for leisure, (iii) liberal education, (iv) instrumental learning, (v) general education, (vi) education in our cultural heritage.

The existing structure of secondary education in New South Wales is based on reports written in a period of optimism reflecting the postwar expansion of the Australian economy. It appears that some of the assumptions made about our society no longer apply because of economic factors over which we have little control.

The educational needs arising from such changed circumstances compel a reappraisal of priorities and strategies in Australian education to a degree that a major restructuring of secondary and tertiary education may be required, regrettably but perhaps inevitably on the basis of expediency.

Politico-economic Forces and Societal Change

Changes in Australian society undoubtedly affect education and those who provide it. In particular, the social structure changes in response to politico-economic forces that dominate the pattern of life in Australia. Some would argue that, at present, these forces are forcing education back to what it has been at some past stage. This view does not do justice, however, to the permanent rather than cyclic changes in power structures affecting Australia and hence education.

Many of the changes come under the broad umbrella of structural change of a society adapting to the changed politico-economic forces of the 1970s and 1980s. Technological changes, particularly the micro-chip and computerization, have a massive effect in changing employment patterns and needs. Equally devastating effects arise from radically changing energy-supply patterns. Two particular employment trends are being observed in this regard. Firstly, technology does not appear to be eliminating the dirty, dangerous, and low-level dead-end jobs characteristic of many big industries. Rather it appears that there is a progressive elimination of the lower-level jobs in the next strata of service-skilled industries that used to be the starting point and training ground for young school leavers. This partly explains the recent rise in the number of unemployed early school leavers.

Partly as a consequence of structural changes in the job market, capital-labour conflicts appear to be gathering momentum, as small groups of strategically placed unionists take power into their own hands to disrupt the economy, to put pressure on the political decision makers, and as a consequence of both of these increasingly to affect normal living conditions.

There are several other apparently permanent changes in the power structures impinging on society and on education. The environmentalist lobby is a reaction to developments that are not in harmony with nature and the needs of people. This lobby is having a powerful effect on decisions for certain structural changes and on education.

Increasing education of the populace, epitomized by higher retention rates in formal education institutions and widespread recurrent education activities, also provides an example of an irreversible shift in power. A better educated populace, for example, views politics in an increasingly sophisticated and perhaps cynical way.

Further, an aging teaching force and militant teachers unions are par-

ticularly powerful forces which are often in head-on conflict with structural changes in society and in education.

Women's place in society has radically changed in recent times. More women are better educated; more are entering the workforce; greater numbers of them are having a marked effect on tertiary institutions; and, in particular, women are influential in changing attitudes to family life. This changing sociology of the family, in particular, affects political decisions and make demands on education different from the past. For instance, increasing breakdown of marriage leads to a greater number of families in crises and dislocation. More children are 'at risk' in these situations. Increasing numbers of remarriages lead to more blended families which imposes new demands on society. The static birth rate and the rising age of the population are both changing the characteristics of our community. Above all, however, there is a totally changed relationship between parents and children that is no longer based on the authority of parents but rather on a basis of greater equality. Thus society is viewing the relationship between adults and children differently. Nowhere is this more evident than in teacher-student relationships in schools and tertiary institutions.

Another major change is evident in the role of the media. An apparent increase in disillusionment with public education is being positively encouraged by the media and fostered by small elitist pressure groups. Recent research by the Australian College of Education and for the Williams inquiry presents a different picture. People are in general happy with their own children's schools but apparently unhappy with other schools and other school systems. This suggests that the pseudo disillusionment with government schools can perhaps be attributed to the media. Nevertheless, however they arise, such power sources put pressures on society and on educational providers.

With all these power groups and processes affecting society, it is perhaps rather surprising that one group most vitally concerned with education is virtually powerless, namely the students. Perhaps their time in any part of the education system is too transient for them to exert much power.

Newcastle Branch

Scientific Change, the Transience of Society, and the Schools

Rapid developments in science and technology affect our society so that knowledge rapidly becomes obsolete and social structures are in a constant state of modification. In view of current trends, we might expect the following types of change:

(i) an increase in individual and family isolation;

(ii) a greater interaction of people of different cultures and value systems, with a consequent reduction in national insularity;

(iii) changes in value systems, with recourse to personal rather than religious sources of morality;
(iv) an increasing involvement of governments, e.g. in the provision of personal welfare services, in monitoring environmental impact, in the oversight of economic development;
(v) increasing activity of economic power groups, especially the influence of the multinational company; and
(vi) an increase of computerization in the acquisition, storage, retrieval, and use of information.

As changes in society involve knowledge, values, and life styles, it is evident that continued learning and reconceptualizing will be required by all members of society at all ages. It is within this context of a learning society that the school must redefine its role. This would seem to affect the school at a number of different levels.

First, there is a need for school structures to be continuously examined in the light of societal change. It is difficult to encourage informed critical questioning and responsible social action if the school requires unquestioning obedience; likewise it is difficult for students and teachers to learn the skills or the values of co-operation, consensus, and responsible caring while working in an authoritarian hierarchy. Some school structures have been modified, but schools themselves are not always quick to respond to society's needs.

Second, there is a need to re-evaluate the relevance of present subject matter, and to emphasize the knowledge and skills required to live in a rapidly changing society. In relation to each of the six types of change outlined above, the school should emphasize:

(i) personal skills, leisure-time activities, and ways of promoting community living and cohesiveness;
(ii) a knowledge of other peoples and cultures, an examination of the ways in which nationalism is manifested, and the rights of minority groups and of those with different backgrounds;
(iii) an examination and rethinking of the functional and formal role played by religion in the past, and a strengthening of other ways to encourage growth and personal morality;
(iv) the need for children to become informed of and to learn to appreciate their civic rights and duties, for people to be able to affect the course of legislation and to use effectively the services available to them in the community, and to develop individual and social knowledge and responsibility, e.g. a working knowledge of the law and how it affects the individual;
(v) the influence of economic groups, especially business and industry, on governments, money markets, and personal lives, and an understanding of the role, processes, and effects of advertising upon individuals and groups;

(vi) a knowledge of the ways information may be used effectively in a computerized society, together with the individual's rights to privacy.

Plan for Post-compulsory Education and Present Tertiary Education

Instead of setting up a new college to provide for the post-compulsory years of education as proposed by Blackburn, two possible alternatives are discussed below. Each seeks to unify post-compulsory educational provision, but in a slightly different way.

(a) One plan provides for the setting up of all post-compulsory education under one educational authority, amalgamating the present technical colleges and CAEs with other types of further education including the pre-matriculation academic courses which are now part of the main stream of Years 11 and 12 in high schools. Courses could be given at a number of different levels and greater flexibility would result from the breaking down of barriers. Specialization could continue where necessary, for example, agricultural provisions, but unnecessary duplication would be avoided or minimized. (It would seem unlikely that universities would wish to be part of this scheme, but they could continue and take over the role of teacher preparation.) The concept is akin to a community college and would appear to have the following advantages.

(i) An adult-type environment would be provided for those adolescents who at 17 or 18 now find the traditional type of school organization repressive and inappropriate for their level of social development.

(ii) Such colleges would provide an open door to lifelong education: pre-matriculation studies would be open to adults; academically inclined students would be able to mix with more practical students; work experience schemes would be interwoven into academic programs; trade skills would be learned by any age group; retraining and extension programs would become part of the general expectation of social change. Family and parenting education could find a comfortable niche.

(iii) In rural centres, such colleges would solve the problem of overlap of technical college and high school provision, and provide a community focus which could respond to local needs. The question of establishing a CAE or a technical college or something different would cease to be an issue.

(b) The second plan does not seek to dismantle any existing organization but to increase the flexibility of the student of any age to benefit from a variety of institutional offerings. The rationalization of resources at the post-compulsory school level and beyond does not necessarily imply one mammoth learning institution; indeed, the impersonality of large institu-

tions may defeat such societal goals as individual commitment to the community and the growth of personal self-esteem. Under this scheme, a person would be permitted to plan a course of study at the post-compulsory level and to study courses offered by more than one institution. This might allow one student to be enrolled in units of study in a high school, while pursuing work experience and related skills at another institution. Each community could evolve patterns of learning resources to suit its own needs.

It should be recognized that this is already occurring to some extent. In secondary schools, transition education programs have already enabled some students to have home groups at school where relevant literacy, numeracy, and social skills are learned, while time each week is spent in attendance at technical college courses and in work experience. Students from senior high schools have also attended CAEs for short courses in particular fields where the CAE resources supplement those of the school. Teachers at CAEs, universities, and schools attend extension courses or conferences in neighbouring institutions and often find their own students as part of their peer group.

Distance teaching and open learning systems are also expanding. Tutorial groups may be established in local centres and serviced from more centralized resources. The correspondence school may be regarded as part of this enterprise. In this way, a wider range of subjects is offered and a different mode of learning is available both before and after the age of compulsory schooling.

A number of outcomes would eventuate:

(i) As learning resources became more accessible to all groups of people, this would involve the expansion of guidance services through both computerized information and individual counselling.
(ii) The rationalization of existing course offerings could eventuate, avoiding costly duplication of services within the community and the more profitable use of buildings, plant, and personnel.
(iii) It could lead to a recognition that learning is a lifelong activity in which all people are likely to be engaged, sometimes full-time and sometimes part-time. This could lead to the breakdown of barriers between age groups, between work and leisure, and between the teacher and pupil.
(iv) More important, it could lead to a diversity of approach in which each community could develop its own pattern of educational offerings at the post-compulsory level, providing for local needs with a flexible arrangement best suited to the community served.

Victoria

Perennial Educational Concerns

In talking about perennial educational concerns, we are referring to the relationship between two fundamental elements of western education —

the development of human culture and the learning of practical skills. At its best, our tradition has sought to maintain a balance between these two elements. It has acknowledged the practical utility of education to fulfil social and economic goals, but has related this to the broader and more long-term purpose of developing a sense of inquiry and understanding of both human society and the material universe. We would argue that it is not possible to promote mass literacy, establish standards, or even prepare young people for some future career, without the development of an appropriate balance between the broader purpose of education and its practical utility. One of the main reasons why important issues currently generate false dilemmas about education is that this balance is not understood.

The difficulty of maintaining the balance within the context of mass education in the post-war period has been underestimated; at best it has been taken for granted. It could be argued that, until the post-war period, the difficulty was resolved by preserving the balance within those levels of education that were open to the hand-picked few, and concentrating primarily on the skills aspect within those levels that catered for the majority. This would certainly help to explain why the rapid expansion of secondary and higher education in the post-war period has led to unresolved conflicts of purpose, since the type of educational practice suited to the more adept and successful proved less readily adaptable for the provision of educational opportunity within the population as a whole. Thus the actual day-to-day experience of teachers, particularly within the non-selective state systems, has brought out more clearly the nature of the challenge associated with universal education that was, perhaps, unforeseen when the legislation for compulsory schooling was enacted.

This is a very important fact to acknowledge because many of the debates about educational quality and standards often overlook the strains placed on Australian education systems by the rapid changes which resulted from the process of expansion. Those changes took place within pre-established educational structures that were designed for the very different form of social aspiration that obtained with Australia until the late 1940s. Those structures had been established at a time when higher education was regarded as the privilege or right of the few, the school population was of constant size and from mainly an English-speaking background, and the majority was expected to leave school once the compulsory schooling age had been passed.

Until the late sixties, virtually the same structures were expected to meet the needs of mass education and high aspiration of a multicultural student body up to and beyond the senior level. The attention given to rapid erection of new, often temporary, school buildings and the strenuous attempts needed to attract as many new teachers as possible to staff the classrooms left all too little time and effort for examining structural and qualitative issues concerning the nature and purpose of Austra-

lian education. Along with the strains of expansion, the challenge of the educational assumptions associated with universal education tended to be overlooked.

That challenge is precisely how the balance between the pursuit of learning and the training in practical skills can be extended to the much more universal and multicultural school population that exists today. Already that population is seriously at risk because of the excessive and disproportionate rate of unemployment among school leavers. They need much more than basic skills to cope with the problems and changes which they will face once they enter adult life. In the past, our society has placed high value on people's ability to reflect on their own experience, to draw upon the resources of our cultural tradition, and to make sense of the world around them as the essential means for finding solutions to the problems that our society has had to face. There is now an urgent need to devise programs of education that will enable the present school population to break open and make sense of their own experience, and thus establish a direct link between their acquisition of basic skills and their ability to participate in society as mature adults. If, for example, literacy is to be more than a mechanical exercise confined to the classroom, in an electronic world of instant communication, this link between the skill of literacy and the student's ability to grasp and make sense of an electronic world needs to be established. The contemporary concern about the effectiveness of Australian education highlights the importance of extending that aspect of our tradition that has emphasized the balance between the growth of an understanding of the world and the learning of the basic skills that enable that understanding to be developed and communicated to others.

An understanding of this tradition has important implications concerning the purpose of schooling. At present, one of the major criticisms levelled at schools is that they have failed to prepare school leavers for the job market. In some quarters it is even suggested that schools are largely to blame for our present levels of unemployment in Australia. The false dilemma here is one between the goal of personal development and that of preparation for the workforce. The impression is created that teachers have failed to fulfil their proper role, and the assertion is made that Australia is now an over-educated society, because the level and type of education young people have gained is not suited to the needs of contemporary Australian industry. Like a number of other educational issues we have drawn attention to, this one is often the subject of over-simplified debate. One side of this debate tends to push the value of self-fulfilment to an extreme form of individualism that ignores the legitimate demands that social goals place on the members of any society. The other side tends to reduce the value of education for society to a solely instrumental level — education is to be provided only to the extent that it has practical use within the market-place. Although we agree that education has a direct

social purpose, that its benefits to society in terms of the skills and qualifications it offers are important, and that the transition from school to work is a vital consideration to put before all teachers, it is extremely short-sighted and, ultimately, a narrow view of society to insist that the 'success' of education should be measured primarily in terms of its ability to meet the needs of the market-place. The transmission of values, the development of human culture, and even the pursuit of learning as a worthy goal in itself are intrinsic criteria of 'success' that cannot simply be subordinated to economic concerns.

Unfinished Business: Inequalities in Education

The existence of continuing inequalities in educational opportunity and outcome must be faced. This issue, however, is often distorted into a false dilemma between merit and mediocrity — or, in another guise, nature and nurture. Yet, in the light of the available evidence, the problem of inequality cannot be explained away so easily. In a society that has at least acknowledged the importance of education as the path to more rewarding occupations and a higher standard of living, the existence of a high correlation between economic and educational disadvantage is a disturbing fact that demands serious analysis rather than idle theorizing. It is certainly a matter that merits the highest possible priority in any inquiry into future education in Australia and, in fact, the value and seriousness of the present debate must ultimately be measured by the degree to which it faces up to this fundamental issue. If this is to be done, however, the over-simplifications that are current in public debates over educational issues must be avoided.

The first and most obvious debate is that about levels of literacy among the present generation of school leavers. The debate presents us with a false dilemma between the achievements of past educational methods and the failure of present ones. We refer to this dilemma as a false one because, not only does it over-simplify the question of literacy and numeracy to a mere matter of method, but it tends to turn the discussion into a simple debate about whether or not illiteracy among school leavers is only a recent phenomenon. The research of Keeves and Bourke certainly indicates that a problem exists (although it is not as alarming as some press reports claim), while the experience of adult literacy programs also demonstrates that the problem is not a new one. We would agree with the Schools Commission (1976:2.12) in its statement:

> ... there is no evidence to suggest that in some golden past all children gained these skills to a degree which opened up future learning possibilities ... what has changed is that failure to gain the access skills is no longer acceptable.

The real issue at stake here is the provision of a sound basic education for all. Again, in the words of the Schools Commission (1976:2.13), 'the challenge now facing us [is], ... that of assisting all children to levels of

competence and enjoyment in achievement which only a minority reached in the past'. This challenge is a serious one that is often underestimated in public debate about educational standards.

On this score, we are presented with the false dilemma of conservatism versus progressivism. The debate artificially separates from each other factors that are interrelated — it becomes a simplistic argument about content versus process, teacher initiative versus pupil initiative, classroom control versus the encouragement of self-discipline, external goals versus self-motivation, tradition versus change, and even punctuation versus self-expression. The sad feature of this debate from an educational point of view is that it takes place in a vacuum that all too often ignores the clear and unmistakable link between educational and economic disadvantage. It is not sufficient to suggest that it is simply a problem of method, or that some individuals are more talented than others, that some social backgrounds are more conducive to educational achievement, or, as a last resort, that Australia cannot bear the cost of, nor benefit from, higher education for everyone who wants it. No one of these suggestions, however true it might be in itself, is sufficient justification for the co-existence, in a professedly egalitarian and free society, of privileged access on the part of some and undeniable disadvantage on the part of others. The direct link, for example, between poverty and education has been clearly documented by the Inquiry into Poverty, and there can be no excuse for ignoring its evidence in the present, but subsequent, context. The report draws attention to one of the most unpalatable features of Australian education:

> People who are poor and disadvantaged are victims of a societal confidence trick. They have been encouraged to believe that a major goal of schooling is to increase equality while, in reality, schools reflect society's intention to maintain the present unequal distribution of status and power. Because the myth of equal opportunity has been so widely accepted by Australians, the nature of unequal outcomes has been largely ignored. Thus, failure to succeed in the competition is generally viewed as being the fault of the individual rather than as the inevitable way our society is structured. (Australia. Commission of Inquiry into Poverty, 1976:231)

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Queensland

State and Regional Diversity

Many of the factors prominent in the analysis of Australian society, proposed by the papers of Aitkin, Blackburn, Crittenden, and Williams, relate to a broad overview of what is seen as a general Australian society.

While such an overview provides valuable insights into the nature of and trends discernible in society, it should be realized that, within such a general overview, diversity exists among and within States on many of the factors discussed.

General national indicators to social change need to be accompanied by a finer analysis of the available data in order to gain a perspective on state and regional differences in the types of social change occurring, the impact of such changes at the immediate regional level, and their eventual perceived impact on education systems.

Consideration of the impact of social change on education systems cannot be adequately undertaken without initial reflection on the differences among these systems. Although Australian education systems, organized under state jurisdiction, display many commonalities, it cannot be assumed that a unitary Australian education system exists. Significant differences in systemic structure and functioning occur among and even within the various States. Consideration of these differences is a necessary step in developing a perspective from which a study of the relationship between societal change and public education systems can be instigated. In taking account of diversity among States, the following six areas are prominent factors to be considered:

(a) state and regional diversity with respect to societal change

(i) demographic factors;

(ii) economic factors;

(b) state and regional diversity with respect to education institutions and jurisdiction

(iii) systemic structures;

(iv) systemic administrative style;

(v) influence of geographical factors on systemic structure and functioning;

(vi) political and ideological orientation of state systems.

Demographic Factors

A common assumption seems to pervade all four papers that education is entering a period of 'no growth'. While the long-term demographic arguments that population growth to the end of the century is slowing down and that the national proportion of 5 to 17-year-olds will diminish are convincing, account must be taken of regional diversities.

In his paper, Aitkin makes a general assumption about population growth without analysing the distribution of the projection data from state to state. Conclusions based on the data are restricted to a global framework. Crittenden reaches a more specific conclusion:

> It seems that, after 30 years of continuous and rapid expansion, the provision of education in Australia has entered a new phase in the late 1970s — one of consolidation, redeployment of resources, retrenchment.

This is implicitly linked to major demographic changes in society as defined more clearly by Williams:

> In recent years the proportion of the population in the years to the end of compulsory schooling has fallen and is expected to fall further.

These propositions cannot be disputed within a national context. However they would be more compelling if due weight had been given to state distributions in the data. For example, Queensland, the Australian Capital Territory, and the Northern Territory are anomalous with regard to projections for school enrolments.

The projections of school enrolments made in March 1980 by the Commonwealth Department of Education have indicated that from 1978–83, enrolments in government schools will increase by 3.2 per cent in Queensland, 2.3 per cent in the Northern Territory, and 0.6 per cent in the Australian Capital Territory. In the same period, enrolments in non-government schools will increase in all States and Territories by an average of 1.2 per cent.

The rural/urban population division is another important demographic consideration. This has implications for the structure and decentralization policies of state education systems and for current trends in community involvement in the schooling process. The urban/rural dichotomy exhibits great diversity on a regional basis. For example the east coast conurbation of New South Wales and the broad Tasmanian and Queensland distributions can be compared with the South Australian case where 72 per cent of the state population is resident in the state capital. Tasmania and Queensland are also exceptional in the proportion of the population resident in small towns and rural areas. Whereas for all other States the rural proportion of the population averages 26.6 per cent, the proportion for Queensland is 48.2 per cent and for Tasmania 59.8 per cent.

Ethnic diversity is also apparent among States. Size of ethnic community differs not only from State to State, but regionally within States. The proportion of Aboriginal inhabitants in state populations also varies from being a significant factor in the Northern Territory (23.4 per cent), Western Australia (2.2 per cent), and Queensland (2.0 per cent) and a less significant factor in Tasmania (0.7 per cent).

Societal changes associated with these demographic features are, to a great degree, localized, as will be the social and educational response to these changes.

Economic Factors

In identifying economic factors influencing social change, Aitkin comments:

> . . . for high rates of economic growth, optimists forecast a very wealthy Australia, with iron ore, coal, gas, uranium, and other mineral resources far surpassing our traditional primary industries as wealth earners. Resource

extraction does not, of course, provide much employment directly, and there seems a good deal of uncertainty about whether all this wealth can be shared out more or less fairly and usefully.

Doubts concerning the use and distribution of wealth from the exploitation of mineral resources should be qualified by consideration of where within the nation this wealth will be centred. While modest mineral/energy resource development is occurring in all States and the Northern Territory, the greatest concentration of resource wealth is in Western Australia and Queensland, both States whose secondary industry infrastructure is not as complex or developed as those of New South Wales and Victoria. These differences in industrial patterns are, and will increasingly be reflected in, the nature of regional workforces and the nature of population growth within regions.

Systemic Structures

There is no 'Australian education system'. Despite the commonalities among state systems outlined by such observers as R. Freeman Butts (1955), each system has been derived from and shaped by forces sufficiently different to produce variations in the structures of state systems which are responsive to their own political and social milieu. All public education systems in Australia are centralized to varying degrees. All systems have responded in different ways within this centralized structure to develop specialized education agencies and services in response to social and political demands, one recent example being the development of state post-secondary education commissions.

The devolution of authority from a central department to regional centres and to local schools is another practice which has proceeded in a number of ways. Obviously the nature of this devolution process would vary according to geographical and demographic factors. A regionalization program for Tasmania would hardly be suitable for Queensland although similarities in the administrative process would inevitably exist.

A devolution in examination control has been noticeable in recent years. This has not occurred in all States but, in most, such procedures as university entrance examinations have been localized to some degree. The diversity of procedures can be seen in the degree to which matriculation examinations have become school-based: South Australia, 100 per cent external; New South Wales, 50 per cent internal, 50 per cent external; Queensland, 100 per cent internal.

This provides one indicator of the degree of divergence among systems in terms of structure as well as to their social and political contexts.

Systemic Administrative Style

Differences in systemic administrative structures are necessarily reflected in the administrative style of each organization. For example, the organizational cohesiveness possible in such a system as that of the

Australian Capital Territory would be difficult to replicate in a system such as Queensland's which has a range of context factors quite different from those evident in the ACT. These differences in the exercise of authority and in organizational operations to meet the responsibilities imposed by legislation are significant factors in characterizing each state education system. For example, using Beeby's (1973) stages in the development of education systems, one could readily compare the emerging Northern Territory system with a well-established system such as New South Wales.

Influences of Geographical Factors on Systemic Structure and Functioning

Geographical factors have a direct effect upon the organization of state bureaucracies including that of education systems. Wide variation exists among the States on these factors. Obviously demography and economic patterns and developments are also highly correlated with geographical factors. Distance and settlement patterns are the two dominant geographical factors related to the administrative structure of education systems.

Distance is relative. What may be a long journey in Tasmania may be considered a 'good day's drive' in Queensland, the Northern Territory, or Western Australia. Distance is also, of course, absolute. If major regional centres are distributed across a State, as in Queensland, the administrative response will be quite different from the situation in the Northern Territory and Western Australia where there are only two or three regional centres.

The geographical isolation imposed on some segments of the population is also reflected in departmental structures. Whereas in Queensland and Western Australia distance teaching services serve a population which is mainly geographically isolated, in New South Wales distance teaching facilities (predominantly TAFE correspondence courses) service a population which is largely socially isolated in that either they do not wish to attend urban colleges or they live in urban areas where particular courses are not offered.

Political and Ideological Orientations of State Systems

Various ideological stances concerning education are discernible in the four papers. Similar diversity naturally characterizes state education systems. Variation in ideological stance is derived from a number of factors which have been identified in Blackburn's paper, although not explicitly related to ideology: 'the role of paid work ... the power relationship between professionals and other workers ... the poly-ethnic composition of the society ... social mores'.

Ideology is also influenced by regional viewpoints derived from the

historical and political contexts of the States, particularly in terms of relationships among States and between the States and the Commonwealth.

Ideological differences may also be derived from various conceptions of schooling, its relationship to the legislature, the role of the teacher as a professional, and commitment or opposition to particular theories of curriculum and education. Such ideological differences frequently emerge within States and regions as Crittenden points out in terms of developing curriculum theory: 'In relation to curriculum . . . some of these writers stress a certain kind of political awareness and action in identifying a desirable form of education'. These factors are reflected in a variation of ideological viewpoints.

Political influences are more difficult to discern among state systems, particularly party political influences. However public education systems are controlled by the legislature and, within our Westminster system, are obliged to follow policy directives from the legislative branch of government. Obviously such policy initiatives are related to the ideological and political stance of the government of the day, and vary widely from State to State.

Conclusion

The sources of differences identified, together with other manifestations, point to a real problem which confronts all concerned with education in Australia. This problem concerns the way in which education systems respond to identified social changes where these changes impinge with varying intensity across state and regional boundaries. Furthermore failure to account for such diversity provides insufficient guidelines to what specific responses are either feasible or desirable.

Logically this has implications for policy development at the national level. General social policy, including educational policy, cannot be developed in isolation from regional characteristics. Such policy development must take account of geographical, historical, economic, social, institutional, and political factors in order to respond adequately to the changing nature of society and that society's need for educational services.

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South Australia

Education for Change and Expectations of the Community

Education for change has meant a shift by educators from the traditional subject-centred approach to curriculum design and development to one that is based more on the other two curriculum foundations, namely the problems and issues of contemporary society and the interests and needs of the individual learner.

In the eyes of the public, the coherence, cohesiveness, and logical sequencing of subject matter that they knew as students appears to have been lost, as newly created or adapted optional, elective, or integrated studies focusing on social and individual needs have been 'plugged' into the curriculum, without any overall framework or rationale as to their being.

On the one hand, we have thinking, caring, and socially aware educators who have been strongly influenced by further studies in curriculum theory and by 'social' data coming from recent national studies and commissions. In their rush to provide a more relevant problem and learner-centred program, they have often left the impression that they have de-emphasized the importance of the 'basics'. The mass media have inflamed this impression with the promotion of the trendy political curriculum initiatives and ready criticisms, not based on statistical evidence, of low standards in the basics.

On the other hand, we have many confused parents who cannot understand how their children can leave school with communication and number skills so limited that they find it difficult to survive in a world that has ever-increasing selection standards for the dwindling number of job vacancies. They admit that their children may have learnt more about becoming socially aware and sensitive, and have possibly investigated more subject matter that interested them personally, but they quickly point out that such enlightened curriculum initiatives do not win jobs unless supported by a sound grasp of the basics.

Part of the problem has been that education for change has resulted in new content, without the simultaneous development of effective and systematic methods of evaluation which would give educators and parents alike a clear picture of what is actually being achieved. In general, Australian educators have limited skills as evaluators of students and programs, and as diagnosticians of those students with learning difficulties. This is because of gaps in their training program and limited support with respect to evaluation instruments and leadership at a state departmental level.

Curriculum innovations during the seventies would have been more favourably received by the public if:

(i) the old 'filters' of statewide or systemwide exams at Grades 6 or 7 and again at Grade 10 were retained to ensure that all students

mastered minimum competencies in language and number skills — such filters prevented students from drifting through the system with unchecked competencies in the basics;
(ii) individual schools had established mastery programs in language and mathematics with their associated objectives for each grade level, diagnostic instruments and remedial programs, and systematic management and reporting methods.

In order to restore public confidence in educational innovation during the 1980s, educators would be advised to consider many of the statements made by the Curriculum Development Centre (1980:7, 16), Canberra, in their recent publication, *Core Curriculum for Australian Schools.* For example:

> schools and the community at large would be helped by having clear guidelines for curriculum ... incorporate a framework of basic, essential learnings for students ... specify some of the successful ways available for schools to organize learning; and
> ... by training and supporting teachers as evaluators, extending the use of diagnostic tests ... strengthening community participation in school policy making ... we can create a more powerful and educationally valid form of assessment.

In summary, it would appear that if initiatives aimed at educating for change are to be acceptable to the public in the 1980s, then

(i) the rationale for such initiatives and their organization into a logical framework must be made clear to parents through open meetings or written communication to their homes;
(ii) parents and employers must have more input with respect to the content, evaluation, and standards involved in the teaching of the basics;
(iii) teachers must develop greater skills to evaluate new curriculum initiatives, to diagnose learning difficulties, and to get more feedback from parents and students as to the effectiveness of newly created programs.

The Non-Academic Child at Secondary Level: Inappropriate Curricula and Unemployment

Comprehensive education, as practised in many States in Australia, has never settled down comfortably and, in many ways, it may be called a failure. In times of buoyant economy and full employment, such as was the case in the sixties and seventies, the kind and type of secondary education which a State offers do not become major issues. Employers accept the system's product because they have no other option, and often carry out their own training programs. Students and parents under those circumstances are generally content.

In times of depressed economy and large-scale unemployment, partic-

ularly of groups such as school leavers (as we are now witnessing), the education system comes under close scrutiny, or at least it should come under close scrutiny. More importantly, the relevance of the kinds of curricular offerings must be closely assessed because there appears to be every indication that some school leavers do not have qualifications which make them attractive to potential employers. While various education departments are not to blame for the poor state of the economy, they must move to meet the peculiar circumstances that such an economy presents. The deficiencies of secondary schooling are becoming increasingly apparent.

Apart from economic consideration, comprehensiveness at the secondary level was destined to be found inadequate for ideological reasons. If equal educational opportunities mean offering the same, or much the same, kind of education to all secondary students, the outcome invariably means quite unequal educational opportunities for many. Children with differing backgrounds, aptitudes, abilities, and interests cannot all be offered versions of an academic education — at least not to Year 12. The academic tradition has influenced markedly the style of comprehensive education in all States, excepting Victoria with its retention of technical schools and their different academic fare. The academic tradition has been engendered by traditional public opinion, encouraged by public examinations, and supported by the prevailing attitudes (ironically enough) even of employers.

What may be needed is a radically different approach to the upper levels of secondary education. Changes appear necessary, based on a concern that secondary education should be more relevant to increasingly stringent community/employer demands. Equally important, the levels of aspiration of many disenchanted young people need to be raised.

There was a growth of technical schools for secondary students after World War II. Although parents were at liberty to choose between this type of school and a high school, in practice those children with poor academic attainments in primary school elected (or, more truthfully, were selected) to attend technical schools. High schools steadfastly maintained rigid academic standards, thus driving a wedge between the two types of schools because public opinion declared that technical education, being less academic, was inferior. The appointment of teachers in States like South Australia with better academic qualifications to high schools exacerbated the situation. On purely educational (ideological) grounds, there was one dominant reason to criticize adversely the technical school concept. Children who entered these schools at the age of 12 plus were strongly committed to non-professional careers. Some, to their credit, went on to universities and teachers colleges, but most entered the labour force well before their high school contemporaries, and most often took on blue-collar jobs, in the case of boys. The most girls could hope for was a clerical position. The problem, then, was early selection.

The problem by and large was not one of types of courses offered. These often suited the abilities and interests of students and provided the workforce with successive groups of young people adequately trained at least to a pre-vocational level. Course equipment and curricula for students of 15 years and older were at least adequate and, in many new technical high schools, outstandingly good. At the more senior levels, then, the technical high schools were at least partly successful in meeting the requirements of both the students and the community.

By the sixties and early seventies, the comprehensive movement generally held sway in Australia. Not to go comprehensive was immoral; and so the technical high schools simply disappeared (except in Victoria) and a compromise of comprehensiveness appeared.

Close evaluation of the new comprehensive high schools never occurred. Students were being employed when they left school and all was well. All students were being offered academic or quasi-academic courses, thus satisfying public conscience and substantiating traditionalism in education. And weren't more staying at school longer? And wasn't education good?

It was generally considered that the value of offering secondary schooling for all children of a district in a common institution lay in the late selectivity of students. But selectivity for what? For the external public examinations courses and university-type education, so it would seem. The alternatives to the fully academic courses in high schools have earned the sustained contempt of both students and public generally whenever they have been attempted in the various States. Despite all efforts to promulgate the supposed worth of alternative courses (including those leading to internal certificates), they have been seen as second-rate academic offerings.

When secondary schooling became comprehensive, any taint of vocational education was an anathema and the catch-cry of the various education departments was, 'We educate for life, not jobs'. Unfortunately jobs are life, at least to the third (or is this percentage now larger?) of school leavers today who cannot find employment.

In summary, the demise of technical education at the secondary level occurred to give parity of esteem to all students. Placing all secondary students in the one type of school, where traditional academic education has superior status over the other courses offered, ensured that students did *not* appear equal.

Clearly secondary schools need to expand their roles and their curricula to offer an education which will give better opportunities for employment. A somewhat counter statement could be made such as: 'If there are only so many jobs available in Australia, surely a diversification of secondary education schemes would not increase levels of opportunities for youth employment?'

There is evidence, however, in this and other countries (particularly

the United States of America) that employers are willing to take on workers who are trained — and therefore whom they do not have to train extensively themselves — and who add immediately to a firm's economic effectiveness. Thus more skills may be allied to more (total) jobs made available.

One strategy for secondary schools could be based on the strengths of the all-too-hastily-discarded technical schools, the perceived requirements of students in today's economic climate, conjectured futures (economic and social, particularly) and likely public and political acceptance of change.

The following assumptions underline this proposed strategy (which is only one of a number of possibilities):

(i) A limited number of students should be permitted to continue with professional careers, in consideration of the over-laden nature of professions and the personal and economic waste now steadily increasing.

(ii) At the age of 15, students should have a reasonable idea of their future vocational interests, at least broadly; systematic careers awareness should begin in primary schools, and careers advice should be offered at age 14 and 15.

(iii) At the age of 15, students should undertake one of two main streams, academic or pre-vocational/general.

(iv) Nine to ten years of broad general education provide a sufficient background for various types of specialization; however, some general education will be needed throughout secondary schooling.

(v) A more rationalized use should be made of potential education agents for secondary students, including the Department of Further Education, community resources, and the colleges of advanced education.

(vi) The status of the pre-vocational/general course must be maintained at a very high level; this will depend strongly on the amount of planning and organization which precedes its introduction.

(vii) Relevance of pre-vocational/general courses to both student and community requirements will dictate curricular design and implementation.

(viii) Public acceptance of an upper secondary bi-partite system will not be difficult to secure in the present climate of disillusionment with education generally (ironically, often for reasons beyond the control of educators) provided good planning is supported by sound practice.

(ix) Students must be given every chance to gain useful and satisfying employment, and their current level of aspiration must be raised.

This list of assumptions contains all the elements of a rationale for a proposed change at the secondary level. Society can no longer afford to

dither around with the uneasy and unacceptable compromises with which comprehensive education is replete.

It is suggested that an academic stream, consisting of far fewer students than those who now pursue such courses, continues as it does at present. Numbers eventually will be largely determined by community requirements of professional and semi-professional personnel. A large number of students should be encouraged to commence a pre-vocational/general course of education after nine or ten years of broadly general education and, most likely, at about Year 11. Those who complete a three-year course would therefore remain at secondary school one year longer than their contemporaries who undertake the academic course.

Relevance, utility, and flexibility would be the key words of the pre-vocational/general course. It would not be anticipated that all students beginning a course would need to complete the entire three years. Employment chances would be a strong factor determining when a student would leave school. Another factor would be the event that the course is pursued and counted as credit for trade certification. It is possible that some aspects of apprenticeship training could be undertaken at secondary schools which are suitably equipped and staffed. Although such courses would be flexible, there would be tight structure, clearly defined goals, and means of articulation to technical colleges and CAEs for those students wishing to seek higher qualifications. Link courses with TAFE institutions would need to proliferate, and become formalized.

It may be possible to consider certification at three levels in each of about five course options such as commerce, technical, para-professional, agricultural, social services, and the like. In the first year, many subjects, perhaps even ten, could be offered. Many of these would be of a term's duration only, but all would be connected with basic course interest. In succeeding years, the number of subjects would decrease until in the final year perhaps only three or four subjects of a pre-vocational nature would be studied. However, the depth of knowledge demanded of a student would increase at each level. A considerable reservoir of knowledge and skills would be built by a student over three years of course option.

Each year would offer a general studies component (approximately one-third of the total studies undertaken). These would be biased towards a course option taken by a student, particularly at the two higher levels.

An alternative, such as the one suggested, would give many students, presently disillusioned by unemployment, a chance of employment. At least they would know that their upper secondary education was relevant to the demands of the workforce. It is important that whatever is undertaken is done very well. Loose course offerings with students choosing subjects at will from a number of different sources simply will not work. Strong structures, worthwhile outcomes, and public acceptance are basically essential.

Western Australia

Societal Change and its Impact on Education *or* Schools and their Responsible Impact on Societal Change

The theme of the conference has the potential to be harmful if it is interpreted as an endorsement of the trend in educational thought, noted by Crittenden, that 'begins with an examination of significant changes in contemporary society and suggests some consequences for the practice of education'. The problem with a concentration on a one-way relation between society and school is that due recognition may not be given to the responsibility of educators to justify the activities through which they seek to make an impact on society.

Educators seek to change people, and thereby society, for the better. Educators and schools, as educational institutions, respond to what *is* in society and seek to enhance that which *ought* to be continued. Schools also attend to what is changing in society so that change may either be facilitated or redirected. Schools both conserve what is desirable and promote desirable social change, albeit slowly and over a broad front. Educators are thus actively involved in promoting social change rather than passively accepting the consequences of social change.

By concentrating on societal change and its impact on education, recognition may not be given to the responsibility educators have to justify their activities, to the theory which informs their activities, or to the assumptions underlying their theory. Where education in schools is seen to be a response to societal changes (rather than being responsive) then educators may not recognize their responsibility for normative commitment. Educators have a responsibility for the normative stand taken in carrying out their activities. To take this stand is to say, in effect, 'We believe the students to have the characteristics P and society to be X and we undertake the educational program in schools to produce students with the more desirable characteristics Q for a better society that is Y'. This stand is normative in that it depends upon the values held in order to determine what is desirable. But, just as Crittenden has noted, 'there are several fundamentally different, incompatible ways of interpreting the nature of education', so too are there several fundamentally different, incompatible systematic normative stands that can be taken in educational practice. To act on the basis of a particular normative stand requires justification. In justifying educational activities, use is made of educational theory; and sometimes, as in the reports cited by Crittenden, some of the theory is stated and can be scrutinized.

By way of example of the responsibility of educators for their commitment to a normative stand, Crittenden's concluding statement on core curriculum may be considered:

> Perhaps the most satisfactory way of examining the issue of a core curriculum is to focus on what values, knowledge, dispositions, and so on need

> to be developed as common ground sufficient both for the cohesion of the society as a whole and the protection of the diverse cultural groups within it. Respect for different values and traditions and the conduct of a civilized debate between conflicting interpretations of the public good depend on an underlying agreement about values and procedures. The content of this agreement might form the central focus of a common core curriculum of social education. The first step towards such a curriculum would be to examine the state of the underlying consensus within the Australian society.

This first step is an empirical investigation of the existing underlying consensus. But, taking the argument further, the second step would be to set out alternative proposals for deliberation. For example, if attitudes towards racial discrimination were found not to form part of the consensus, then an alternative is to achieve consensus on this issue. There are further alternatives as to what values might be agreed on in this area. Systematic research is needed to assist educators in taking these two steps. The third step is for educators to commit themselves to a normative stand to seek to achieve the desired social consensus. This kind of commitment has been made overtly by educators in the past, as can be seen in the Western Australian Education Department's *The Small Schools' Curriculum* (Perth: 1926, p.200).

> History teaching in the primary school should aim at giving the child an intelligent appreciation of the outline of the story of our race, of the elements from which it has been blended, of the manner in which it has grown up and expanded, of the relation of our branch of the race to the other portions of the Empire, and of the relation of the British race as a whole to other nations. The story of the struggle for freedom and the growth of British liberties and institutions will naturally lead to the rights and duties of the citizens of today. Admiration of the achievements of the British race in peace as well as in war should lead to a broad patriotism and a real sense of our kinship with the other portions of the Empire. Some idea should be given of the obligation that rests upon us to guard and maintain the rights and the liberties which our forefathers won, and of the responsibility of a race that governs so large a portion of the world and controls the destinies of so many other peoples.

While all the values noted here may no longer form part of the central focus of a common core curriculum of social education in Australia, educators should recognize their commitment to some successor of these values.

Crittenden points to the importance of considering educational values in relation to determining the purposes, as well as the processes, of educational institutions. What Crittenden does not emphasize is the normative commitment of educators in acting on one of the sets of educational values and balancing those values and the other non-educational values when making professional judgments. Recognition of this commitment can heighten awareness of the significance of the theoretical assumptions underlying recent developments of Australian education.

This awareness could be further increased, and commitment better informed, if research on this aspect of educational policy was pursued systematically and incorporated into the professional life of educators. This research is more likely to be carried out and be significant if the two-way relationship between society and schools is acknowledged.

The Role of Public Schools

Changing attitudes in society towards greater toleration or fostering pluralism in various forms seem to have an impact on schools of the kind noted by Blackburn and Crittenden. If government aid to Catholic schools is a dead issue, so far as practical politics is concerned, then funding problems will be concentrated on government schools. Issues of funding and diversity combine to call into question 'the notion of "public" as it applies to the practice of education in our society' (Crittenden).

In considering how representative of society the public school system should be, the problem is raised of the limits within which educators may make educational policy. The question is whether government instrumentalities (such as schools or the Australian Broadcasting Commission) should serve all sections of the community in the diverse ways required or whether they should serve only those minority groups not catered for by other bodies. (This is a question of general policy in a mixed economy that provides both government and non-government forms of a service.) This may well be a question of sufficient generality as to require a decision outside the confines of school bureaucracies. In times of significant societal change, not only the answers to particular educational questions are in doubt but also some of the previously accepted framework is in question. To hope that such questions can be usefully tackled at the school level without articulated guidelines would seem like an abrogation of responsibility in favour of political expediency. Is the community at school level charged with the responsibility for making general policy that has not been clearly articulated at state or national level and are the results of those policies deemed to be good in the name of diversity?

Given the selective nature of non-government schooling for more than a century in Australia and the financial pincer movement of significant funding for such schools, together with pressure to reduce government expenditure on education, what should be done if it is decided that government schools should serve *all* sections of the community? One option is to make government schools more competitive in attracting all sections of the community. If government schools are to be more diverse in their offering, they may thus be more sensitive to community requirements. Such diversity may include primary schooling in languages other than English, secondary schooling with particular academic speciality or with a distinctive ethos such as a government Catholic school. If this diversity is anything more than a number of ways to achieve the same tra-

ditional uniformity, then the problem of social cohesion is raised more forcefully. A second option is to exert greater government control over non-government schools. Funding (as on the model of federal funding in the USA) may be withheld from schools which do not meet criteria established to ensure sensitivity to all sections of the community (as defined). This constraint on non-government schools may be used to ensure non-government provision on the basis of ethnic, linguistic, sex, socio-economic, intellectual and/or physical criteria. Such provision could assist the government schools to be sensitive to the requirements of all sections of the community because there would not be a disproportionate representation of one group in non-government schools and of another group in government schools. The problem is that such a move may defeat the point of non-government schooling but those schools could still continue (but without government funding). A third option is to regard all schools as government funded (to varying extents) and to be satisfied if all the schools, as a collective body, are sensitive to the requirements of all sections of the community. The fully funded government schools may well be in areas, or for groups, that are not attractive for non-government schools. The problem with this option is that, while accepting that all is well with schooling, the government or public schools are designed to serve only the unattractive or uneconomic groups.

Educators make policy decisions at various levels of generality. It would seem outside educators' competence to decide which notion of 'public' is to be applied in the Australian mixed economy. A clear policy on this matter would provide a framework within which the education issues may be addressed.

PAPERS PRESENTED AT THE CONFERENCE

12

Social Influences on Education: The British Case

A.H. Halsey

That education is a creature of society is a sociological commonplace. The difficulty and the excitement appears, however, when the attempt is made to trace and test particular causal propositions which relate identifiable features of social structure to education and *vice versa*. The relevant classical source in modern sociology is Emile Durkheim's *L'Evolution Pedagogique en France* which was delivered as a series of lectures in 1904–5 at the Sorbonne, but not published until 1938, and not translated adequately into English until 1978. It is the classic source because, while Durkheim always held the content of education at the centre of his attention, he never lost sight of the social context in which an educational system operates. Looking at education in France from the period of the 'primitive church' to that of the Third Republic, and reviewing the history of what the French call *les idées pedagogiques*, Durkheim demonstrated how social patterns of power and control determined the way in which knowledge is transmitted and evaluated.

Nor is Durkheim's example irrelevant to this conference, where contributors are invited not so much to celebrate 50 years of Australian educational research, but to peer into the future; for Durkheim reminded us that 'it is only in carefully studying the past that we will be able to predict the future and to understand the present'. Moreover Durkheim's theory of social change is essentially one based on recognition of an evolutionary trend towards increasing complexity in the division of labour — a trend which shows no sign of abating in Australia or elsewhere in our own time. For him, educational change was essentially dependent on that process.

For example, in his remarkable analysis of the social basis of pedagogical ideals during the Renaissance, Durkheim begins with the generalization that 'a pedagogical transformation is always the result and sign of a social transformation that explains it'. In this case, the precipitating social

change was the rise of what he terms 'polite society' — a new pattern of life developed on the basis of economic growth in the late Middle Ages, which encouraged a taste for luxurious and elegant life, not only among the aristocracy but also among the increasingly powerful bourgeoisie. Accordingly the new educational ideals, which emphasized sophisticated standards of speech and writing, reflected aspirations towards 'polish' and 'refinement' in a bourgeoisie enjoying reduced social distance from the aristocracy. Essentially aristocratic in spirit, the pedagogy of the Renaissance (the rediscovery, that is, of Hellenic culture) embodied a class ideology which did not take the needs of the masses into its purview. It made rhetoric the queen of the scholarly disciplines and thus could only develop qualities geared to a life of luxury, detached from the life of toil and the manual arts which were the lot of the great majority. The equivalent educational challenge in rich countries today is to democratize an education for people who can, and probably will, spend much less of their lives in work and much more in 'idleness'.

Durkheim goes on to tell the story of the educational institutions run by the Jesuits and to reveal the principles of social control which were used in their pedagogical system. In their celebrated discipline, the Jesuits used two techniques for the maintenance of order in the classroom: constant personal surveillance; and the encouragement of emulation. In this way, they adapted a tutorial technique to the needs of individuals and, at the same time, effectively imparted personal knowledge of the teachings of the Church. By the encouragement of individual competition, they guaranteed academic excellence in a manner which, in our own age of populism and democracy, we find difficult to justify.

As Durkheim argued, individual competitiveness was not an arbitrary Jesuit invention but itself an outcome of the historical trend towards individualization which was so marked a feature of Renaissance humanism. The communal techniques of the Middle Ages gave way under the Jesuits to the individualistic form of tutorial control. In the experience of the recent past, we have seen a new battle in schools between communal and individual principles.

It is analyses of this kind which make sociology such a powerful tool in the understanding of education. An example in the reverse direction could be taken from the work of Goody and Watt (1963) in their analysis of developments in the institutions of language. In their famous essay on the consequences of literacy, they show how the invention of writing, associated with the urban revolution of the ancient Near East, made an essential difference to the cultural traditions of complex societies. They show that the first methods of writing were difficult to master. Consequently their use was socially constricted and their effects were relatively limited.

> [When, however,] the simplicity and flexibility of later alphabetic writing made widespread literacy possible, for the first time there began to take con-

crete shape in the Greek world of the seventh century B.C. a society that was essentially literate and that soon established many of the institutions that became characteristic of all later literate societies.

Thus a pedagogical art, acquiring an intrinsically democratizable form, profoundly changed access to knowledge and its transmission.

I cite these two examples from the sociology of education partly to illustrate the effectiveness of the method, but also to introduce the relevance of the substance, for they both point to the need to consider education as a process through which relations of power in social structures are translated into relations of influence between generations.

For the rising generation, these relations turn crucially on politics or, more precisely, on the capacity of societies to produce and distribute economic goods and cultural opportunities by political means. Indeed, in the very recent past, the main preoccupation of theorists in the social and educational sciences has been with the search for true propositions concerning the relation between government and education. Most people believe that governments can, and should, change the world: and most believers think that the potency of politics can, and should, be expressed through educational reform. Both of these doctrines stem from the Enlightenment, but both have had their heyday in the 30 years following the end of the Second World War. They signal relative disbelief in the power of religion, kinship, race, and class. Modern progressives have thought of these structures of social relationship as vestigial from more primitive times. Modernity would eliminate them. Government would be based on rational party debate. And above all, education, universally offered as preparation for citizenship, would be the principal instrument. We lived, in other words, for 30 years in dedication to the twin beliefs that politicians and teachers were the bearers of the future.

I am referring here to what, in effect, has been a modern secular church based on economic growth. In the western world, to which Australia belongs, the metropolitan cathedral is perhaps Chateau La Muette in Paris which is the headquarters of OECD. But, like the older church, the western headquarters is a modern version of the older schism. Russian orthodoxy is heard only through its critics, and China (unlike Japan) is a remote obscurity of strange gods. From time to time, the high dignitaries of OECD take council with their priesthood (the 'experts') of economists, sociologists, and educationalists who congregate regularly in conferences, seminars, and symposia, to celebrate and review the modern progressivism. But in the early 1970s the ritual confidence of these affirmatory masses was disturbed: doubts and heresies began seriously to intrude. The idea of the effectiveness of governmental policies as means to the end of giving people fairer shares in life, particularly through education, was thrown into contention.

A characteristic example is provided by the OECD publication of 1976, *Education, Inequality and Life Chances*. The problem was not that of

the old heresies of the 1950s which, whether written on Black Papers or modishly dressed in Jensenist garb, disseminated the error of a restricted pool of ability. The congress on which this particular publication reported was concerned with the graver issue of mounting evidence that works had not lived up to faith, with the result that a new and much more dangerous subversion had appeared — the Jencksian heresy — which holds that educational reform cannot produce equality. Schools, Jencks (1972) had argued, have negligible effect on people's varied chances in life. Life chances are determined not so much by schools nor even by families (nor, incidentally, by genes), but by what they are, chance. Short of a total denial of the potency of politics, nothing could have been more calculated to disturb the equanimity or challenge the doctrinal authority of the progressive educationalist of the previous generation.

Jencks had, in effect, challenged the vast investment in educational expansion which had featured so prominently in western policies in the 1960s. By the 1980s, heresy has become orthodoxy. Sceptical thought has been generalized through monetarism and the revival of nineteenth-century conceptions of the 'night watchman' state into a newly dominant belief in the impotence of politics. And action, as it always does, powerfully reinforces belief. The world economy is in recession, there are new forms of mass unemployment, prospects of zero growth, taxpayers' revolts, Thatcherite governmental policies. The educational cardinals are thus impelled to transfer their attention from growth to distribution as they anxiously review the achievements and failures of previous generations of educational effort.

Reappraisal now gives us clearer retrospect. For some, educational expansion had been primarily an extension of individual liberties — freedom, that is, to attain 'personal fulfilment', or to move on merit to a more advantageous position in life than that into which one happened to be born. This philosophy tends to take the structure of inequality for granted. It seems not to change social structures so much as to provide for as much equality of opportunity as possible between generations, and education has been a major tool to its purpose. On a second view, the expansion of education, it was hoped, would change social structures: in particular, reducing inequalities of income by reducing the dispersion in educational qualifications between individuals. It might also have the same effects with respect to the social distances between individuals and groups, common schooling leading to common respect and the reduction of status differentials. This structural type of egalitarianism also includes the views of those who have advocated inequality in the name of equality under such programs as compensatory education in America, or positive discrimination in Britain. Thus the first approach puts its emphasis more on liberty, and the second more on fraternity. Both have a place for equality, but the first leans towards equality of opportunity, and the second towards equality of outcome. These internal differences between

progressives continue to be debated, and nowhere less than in Britain at the present time.

Life chances clearly have to be looked at as processes over life cycles. These processes begin with the structure of opportunity. Traditional policies have been largely focused on the extension of opportunities in societies in which individuals are born into a hierarchy of class, status, and power. Expansion of educational opportunity, apart from considerations of efficiency in the labour market, have been justified as a desired movement from ascribed (who you are at birth) to achieved (what you do in life) educational levels. Expansion has thus been seen as a pre-condition for meritocracy. But, given the unequal starting points, and given that all advanced educational levels are less than universally provided, there is a marked tendency for an individual to receive further educational opportunity, vocational or non-vocational, according to the previous opportunities of which he has taken advantage. For example, as Maureen Woodhall (1976) has shown:

> In Britain in 1971, only 1 per cent of workers in unskilled occupations received in-service training, compared with 10 per cent in skilled occupations, and 30 per cent in some professions.

Similarly, in non-vocational education,

> those who left school at minimum school leaving age are least likely to attend evening classes later in life, and if they do, they will probably be charged fees.

Nevertheless, for the period from 1950 to the mid-1970s the OECD countries commonly show meritocratic trends of opportunity. Roughly dividing the chances of higher education for middle-class children by those for working-class children at the beginning and the end of the decade, the ratios fell from 8:1 to 5:0 in France, and this is a typical figure. How far the ratio could possibly fall remains a large question. Some are inclined to argue that meritocracy is reached with ratios of more than 1 if allowances are made for the class distribution of IQ. This obviously raises ancient controversies about the social distribution of genetic potential for learning. On this, Torsten Husén has declared that the notion of heritability (that is, how much is IQ nature and how much nurture) is useless. The debate is unfinished, but there is widespread acceptance now that the causes of IQ are interactive outcomes of genes and experience, and that therefore there is no meaningful universal formula such as the often-quoted 80 per cent heritability. At the same time, there is also fair agreement that the cost of reducing the ratios to a minimum is high, if indeed the task is not impossible, because of our ignorance of the social determinants of educability. At all events, the 30 years of egalitarian progressivism never clearly established just how far a society could equalize life chances for its children.

The British Experience

A society may distribute its opportunities according to many different principles. Primogeniture, for example, is a familiar device, and we retain it for the monarchy, the principle being that the first born has the right to inheritance. Some form of inheritance or ascription has been the dominant traditional principle in the whole history of human society — that is, until the modern age of industrialism and equality. But now ascription is morally on the defensive, assailed on every hand by both liberal and egalitarian protests against the traditional influences of class, region, and gender. Of course, the egalitarian impulse was always there to motivate the guilt and compassion of the privileged as well as the resentment and ambition of the disadvantaged. The role of industrialism has been essentially that of a catalyst – providing both encouragement towards openness, and resources for political redistribution of opportunity.

Industrialism, and even more our emerging post-industrialism, requires, or at least encourages, a more complex division of labour, and a more mobile workforce; it gives opportunity for new skills, makes old ones obsolescent, releases knowledge and its acquisition from familial and quasi-familial networks, and above all generates the economic surplus which makes possible the pursuit of equal opportunities through governmental spending. At the same time, however, industrialism, especially in Britain and more generally in capitalist countries of the west European type, generated a class system: and it is the paradoxical nature of class to be at once open and at the same time tending towards closure because parents seek to convert their own class advantages into enhanced opportunities for their own children. Thus two moralities live side by side. All good parents wish to do their best for their own children, but all good citizens acknowledge the fairness of equal chances for all children. In consequence, the family and the market are pitted against the state and the bureaucracy in struggles for scarce goods and services, each acting as the agent of principles which, in the end, are contradictory.

Modern educational systems can be thought of as, from one point of view, the instruments used by the state in a grand strategy of egalitarianism. In Britain, the 1870, 1902, and 1944 Education Acts have been stages in the development of that strategy. The underlying theory has been that life chances depend upon education; that education controlled by the state could overcome the inequalities of family, neighbourhood, and class; and that education could be equalized by expansion. The application of this theory is essentially what my Oxford colleagues, Anthony Heath and John Ridge, and I have been exploring in our *Origins and Destinations* (Halsey, Heath and Ridge, 1980).

We were enabled to do so on the basis of our national survey on mobility which gave us a sample of familial, educational, and occupational biographies collected from 10 000 men in England and Wales in

1972. By the device of arranging these records of individuals in birth cohorts, we were able essentially to reconstruct the experience of a cross-section of boys passing through the educational system as it developed from the First World War to the 1960s. We were, in effect, able to observe, in the natural laboratory of the history of one country, how far a social and political theory of Victorian origin had turned out in practice.

The background of the Oxford mobility survey also told us a great deal about the context in which this social experiment in equalization through education expansion has taken place. Britain in this century, rumours of doom notwithstanding, and at least up to the 1970s, has been a country of continuing economic growth and social mobility. In each succeeding decade, the material circumstances of the average child have improved. The class structure itself has gradually been modified in the direction of enlarging the middle class and shrinking the working class. For example, 10 per cent of those born between 1913 and 1922 came from the middle class (of professionals, administrators, managers, proprietors, and supervisors). But for the birth cohort of 1943–52 the proportion was 18 per cent. In general, throughout the period the chance of a middle-class childhood grew and, within the working class, there was an increased chance that a boy would grow up in a smaller family with a larger income, and with more educated parents. In the process, a relatively smaller but more hereditary, and probably more culturally homogeneous, working class has grown up — what Goldthorpe (1980) calls a 'mature working class'. In the same process, the middle class has become more heterogeneous and diversely recruited, not so much by class heredity but more by upward mobility from other class origins.

Against this background, we can ask the two questions which derive from the theory of equality through expansion, and which refer to the principles of allocation. First, was there a movement towards equality of opportunity and, second, was there a movement towards allocation by merit?

The answers to both questions can be put simply as negatives. But the details are both complex and interesting. For example, the statutory raising of the school leaving age to 15 in 1947 ensured the important equality for all of a ten-year schooling. At the same time this legislation, like the guarantee of secondary schooling after 1944, or the further raising of the leaving age to 16 in 1974, just as necessarily produced an inequality between generations. Egalitarian legislation in a strategy of expansion cannot avoid discriminating against age, at least until a new 'steady state' is reached at the death of the last survivors of the reform. Incidentally, it is relevant to notice that a contracting future would produce the opposite effect. Moreover, legislation on the distribution of scarce goods is typically more a confirmation of social trends than a socially-equal benefaction. Thus, in the period we have studied, the middle class set a pattern of increasingly-extended secondary schooling, following a path

along an elongated S or logistic curve towards saturation (of approximately two-thirds), and the path was trodden later by the lower-middle class, and finally by the working class.

These patterns of expansion are accordingly complex in their effects on social equality. New opportunities such as free grammar schooling after 1944, or university places in the 1960s, were seized initially more by the middle than by the working classes. There seems to be a logic of logistic curves such that the hierarchy of classes is transformed by egalitarian expansion into a moving column, with the middle class in the van and the working class in the rear, passing points of consumption or, in this case, educational welfare which had been reached by the more advantaged classes at an earlier point in history.

Meanwhile, from the point of view of equality of chances in the labour market, the terms of competition move on. Indeed it is useful, if still more complicating, to see education as a 'positional' rather than an ordinary consumption good. Competition for jobs on this view is determined by one's position in the educational queue, rather than by an absolute amount of schooling or qualification. In so far as education is a positional good, and given the class inequalities of *de facto* access to new and superior opportunities, class equality is an ever-receding target.

On the other hand, the creation of 'cultural capital', to use a metaphor much favoured by French writers such as Pierre Bourdieu, is a massive fact of modern British educational history. Our analysis has not led us to accept any great claim for Bourdieu's thesis that, in modern capitalist countries, cultural capital is the means of reproducing the social classes. Education provides mechanisms for families to pass on their advantages, but accumulation and dissemination are at least as notable a feature of educational expansion. In Britain at least, there has been much upward intergenerational educational mobility, and the overwhelming features of the state selective schools in the twentieth century has been the presence in them of a dominant element of first generation grammar and technical school boys who were novitiates into the 'national cultural heritage'.

So much for the complexities of social equality. But the terms of educational justice shared by many conservatives and radicals have been those of equal shares for equal merit. We have tackled the tangle of meaning here by comparing the real world with a world in which schooling is allocated exclusively on meritocratic grounds. For the purposes of analysis and argument, we have accepted IQ as the measure of merit, and estimated its class distribution. We have then compared the real world of distribution in schools and colleges with the hypothetical world of a meritocratic system. It is important to emphasize here that, without rehearsing all the objections to the assumption that class in no way affects measured IQ, our assessment of the gap between reality and meritocracy is biased — that is, it is bound to be an underestimate. Yet we find that at each stage from primary to secondary to post-secondary selection, and at

each historical stage of the expansion of secondary and higher education, merit is modified by class discrimination.

Meritocracy

The details of our analysis of the British experience in terms of a meritocratic model are presented in *Origins and Destinations*. We started with estimates of the distribution of IQ scores among children of three broad social classes — middle, lower-middle, and working. We then assumed an academic-social hierarchy of educational institutions running from the most exclusive private schools with membership of the Headmasters Conference (HMC) at the top down to the unselective state secondary at the bottom. We then postulated that this hierarchy of institutions constituted a pecking order for selecting the most talented available children (that is, those with the highest IQ scores). This gave us a model from which we could calculate the proportionate share of places which would go to each class in a fully meritocratic system of selection. Finally, we juxtaposed meritocratic allocation against actual allocation to gauge the degree to which the real world approximated meritocracy. The juxtaposition demonstrated class injustice, which stubbornly resisted the deliberate efforts of central and local government through three-quarters of a century, which was *not* the result of deliberate discrimination by the schools themselves, which was the opposite of official intention, and which, incidentally, fluctuated more because of demographic change than because of legislative or administrative action.

On our calculations for the period between 1923 and 1963, in a fully meritocratic educational system, 58 per cent of boys from the middle class would have been selected for some form of selective secondary schooling, whereas in practice an extra 14 per cent were. Conversely, the model predicts that 28 per cent of the working class would have been selected in a fully meritocratic system, whereas in fact 4 per cent fewer were given places, a percentage which represents a total of around 6000 boys who were denied their meritocratic due *each year*.

The strength or weakness of the meritocratic principle varied between types of school and stages in the educational career. At entry to secondary school, the private sector was consistently less meritocratic than the state sector. In competition for places at technical and grammar schools, working-class boys suffered a handicap in comparison with boys from the middle-class equivalent to 7 IQ points. In competition for places at the non-HMC schools, the handicap widened to 9 points, for places at the direct grant schools to 10 points, and for places at the private HMC schools to 11 points. Moving through the school career, the working-class/middle-class IQ handicap was 9.9 points at age 16, 10.3 points at age 17, 7.5 points at age 18, and 6.6 points at entry to the university. Access to the sixth form was, therefore, a crucial point of social selection, and one

where departure from meritocracy and consequential wastage of talent was at its maximum.

Perhaps the most important result of our analysis of meritocracy, however, is that the 1944 Education Act brought England and Wales no nearer to the ideal of a meritocratic society. The working-class/middle-class IQ handicap was much the same after the Act as it had been before, the apparent reduction in the 1943-52 birth cohort being attributable to a fall in the mean IQ of the expanded middle class. The wholly admirable aims of the Act had been to ensure that 'the places in secondary schools are filled by the ablest candidates for admission', and to prevent the possibility that 'a parent by paying only one-third of the cost of education can buy a place in a secondary school for his child, possibly to the exclusion of an abler child whose parent is not in that position'. In the event, however, the more affluent parents were relieved of the need to pay even one-third of the cost. Secondary education was made free in order to enable the poor to take more advantage of it, but the paradoxical consequence was to increase subsidies to the better-off.

From the retrospect of British experiences we see, in short, that the journey towards an educationally-fair society is a long one. Indeed, our researches at Oxford might be held to have demonstrated that expanding a traditional structure of opportunities guaranteed failure to equalize. Those who want equality of outcome between classes might then gloomily extrapolate from the past, and conclude that this ideal is beyond the reach of public policy. Such an inference would be false. We must avoid the error of generalizing from the experience of a particular history to some supposed universal imperative of social policy. To be sure, formidable barriers remain, and they are not peculiar to the British case. The two moralities seem to exist in all societies, so that private tutoring flourishes in Russia just as much as the commercial ('public') schools in Britain. Positively discriminatory pre-schooling has been aborted, leaving an easier start to the children of the better-off. The gap between the statutory leaving age and university or college entrance still impedes thousands of working-class children without the help of maintenance grants.

In the present climate of economic storms and political gloom, some will seize on the idea of education as a positional good, and refuse to attempt further progress along an impossible journey. But we do not know what will be the future relation between education and jobs in an age when the division of labour is being fundamentally reconstructed. Moreover, education is still at least *also* a consumption good — the mark, be it added, of a civilized society. On that view alone, the journey is worth undertaking, and the most immediate challenge in Britain is to make comprehensive schools the glory that they could be. From that same point of view, the expansionist strategy we inherited from the Victorians remains the best map we have of the route to a more open society.

Prospects

What then, we may finally ask, are the prospects for the now vulnerable strategy of educational expansion? To be sanguine in the short run is mere foolishness. There is no foreseeable return to buoyant educational budgets riding high on a tide of economic growth. It is regrettable, and even ironic, in that if we could now have a further period of educational expansion under the demographic conditions which are giving us falling school enrolments, we could move decisively towards the kind of equality which has for so long escaped the intentions of reform. Yet, though the fall in the size of the school population makes equality of opportunity easier to achieve, educational retrenchment just as surely postpones it.

In any case, I would want to urge that our thoughts for the future should cease to be based on a futurology of extrapolation. Such a projection of past trends, apart from its intellectual triviality and whether or not it forecasts optimism or pessimism, is academically boring and politically evasive. There is an alternative futurology which is intellectually challenging and politically inspiring. It is to decide what future one wants, second to analyse accurately what present one has, and third to work out the political, economic, and social paths from the real present to the desired future.

To spell out such a diagnosis into political and educational policy is too large a task for the present essay. But it is the urgent task for such bodies as the ACER, or its equivalent in Britain, or in any other country. All I can offer here are some concluding remarks on the aims, assumptions, and conditions that are involved.

As to aims, I take it that the dreams of the educational progressives will not change very much. Certainly a British conservative government will not carry the nation back to the ideology of nineteenth-century liberalism. Liberty and equality in some arguable combination will remain the social abstractions of educational effort — the ideals to which all practical intentions must conform. Whether aggressively or defensively, the educational lobby has a permanent task of political persuasion here.

More difficult are the assumptions and conditions. Negatively it is now more apparent than ever before that the strategy of high-spending state benevolence cannot be relied upon. None of its principal assumptions are safe. There is no guarantee of economic growth, there is no certain national economic return to educational investment and large-scale bureaucracy, even a bureaucracy of educational enthusiasts, which is at best an inefficient and at worst a subverting means to liberty and equality.

Positively, we must assume that the relationships between education, opportunity, work, and leisure, as we have understood them historically, are open to fundamental change. The idea of continuing or recurrent education is at an early stage of responsive appreciation of these changing conditions. In more mature forms, it could be the social revolution of a post-industrial society.

Let me elaborate this dramatic claim. The state systems of education in the age of liberal industrialism have been an integral part of a society in which education, employment, and retirement were distinct stages of a life cycle of dependence, independence, and dependence — of receipts, payments, and receipts. The social transactions involved assumed an articulation between a formal economy and a formal polity. Transfers in cash and kind between the two, the formal economy distributing and the formal polity redistributing to the family, kept a balance of income through the life cycle of the individual's childhood, adulthood, and old age. But that system is being modified fundamentally. There is now a sizable informal economy which bypasses the fiscal relation between government and employment. There is an unfinished movement towards incorporation of women into the formal economy as well as a still less-finished incorporation of men into the informal economy; and technical change has altered, and continues to alter, the relative rewards and prices of labour and goods in the two economies. For example, the relative prices of goods in the formal economy which are used as producer goods (consumer durables, cars, do-it-yourself tools) have, in the informal economy, fallen steadily in relation to the price of direct services from the formal economy. A specially relevant example is the falling relative price of capital-intensive pedagogical aids (television, radio, cassettes, information-retrieval devices, etc.) relative to the labour-intensive methods of traditional schooling.

In these ways, the relationships of the sexes and the economy of the household are being transformed. The process as a whole is what I have referred to as a fundamental renegotiation of the traditional division of labour. And along with that transformation, an educational transformation may be expected. Its form and content is not obvious. What is obvious is that its scale could be immense. Its impact on educational levels of living and their social distribution is not readily predictable. The challenge is to bring it within the realm of the predictable by careful analysis, imaginative planning, and determined political action.

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13

The Future of Formal Education

Torsten Husén

The studies I have conducted of the school as an institution grew out of my research related to the Swedish school reforms when my attention was focused on factors conducive to resistance to change. In pursuing studies on institutional factors behind resistance to reforms, I began to study potential changes, which in turn led to futurologic exercises (Husén, 1971). Before venturing scenarios of the school of the future, diagnosis of present problems that beset the school as an institution were conducted. They have been reported in *The School in Question* (Husén, 1979).

The Changing Auspices of Formal Education

Since the topic assigned to me is an open invitation to indulge in frivolous speculation, I thought that it would be both appropriate and relatively safe to begin by pointing out the changing auspices under which formal education has begun to operate in the 1970s and most likely will continue to operate during the 1980s.

The 1960s were in several respects 'golden years' for formal education, which developed in most industrial societies under at least the three following overriding and highly favourable auspices:

(1) A rapid *economic growth* allowed the educational system to grow even more rapidly, in Western Europe and North America twice as rapidly, than the economy as measured by the gross national product (GNP).

(2) The expansion of the system meant in several countries an *enrolment explosion*, first at the secondary and then at the tertiary level. New categories of students — not least those from hitherto neglected or disadvantaged sectors of society, such as those from rural areas or working-class homes — were brought to institutions of advanced learning. It was, in the liberal tradition, envisioned that expanded enrolment would automatically equalize educational opportunities.

(3) Well into the late 1960s, there was an unshakable *belief in what formal education could accomplish* by promoting not only the individual career but the common goal as well. The long-standing liberal belief that education could improve society and solve its social evils flourished. Education was called a 'spearhead' towards the future in a keynote address at an OECD meeting in Sèvres in 1968. Economists presented evidence in support of the notion that education accounted for a large proportion of the economic growth, even to the extent that the total effect of education and research was equal to or even surpassed the combined effect of that of physical capital and supply of labour together.

The turning point when auspices changed came around 1970. The signs were already on the wall in 1967, when President Johnson invited some 150 educators from all over the world to a conference in Williamsburg, Virginia, chaired by the then Secretary of Health, Education, and Welfare, John Gardner, and the President of the Cornell University, James A. Perkins. The theme of the conference was 'World Crisis in Education' (Coombs, 1968; Bereday, 1969). The main critical issue identified was the lack of balance between demand and supply of education all over the world and, furthermore, certain internal inadequacies of the system, such as irrelevant curricula. But the unrest that broke out a year later at American and European universities and spread to secondary schools was at least partly triggered by other inadequacies which in 1967 were hardly identified.

The changed auspices under which, not least, secondary education has to operate are largely the following:

(1) *Economic growth* has slowed down to a point of close to a steady state. The industrialized countries find themselves caught in a 'stagflation'. This is hard to take, since people had become used to setting their expectations, and to planning for the future, according to the notion of continuous growth which provides an evergrowing margin for the improvement of the individual standard of living and an annual considerable expansion of the public sector in terms of more extensive public services, not least public education. The implications of the new financial situation for education have been referred to by the economist, Kenneth Boulding (1975), as a 'management of decline'. It was, in any case, a decline in relation to the prevailing expectations among the general public. The era of high-spending state benevolence is behind us.

(2) The *enrolment explosion subsided* and turned into a decrease of enrolment cohorts who entered institutions for further study, in many cases in absolute if not in relative numbers. The 'pill' took educational planners by surprise by bringing about what the Germans referred to as a *Pillenknick* in the enrolment curves. The fact that in some countries the age groups born in the late 1960s and the 1970s have decreased by 30–50 per cent has had and will continue to have dramatic consequences in the first place, of course, in terms of the absolute size of the age cohorts

enrolling in upper-secondary and particularly in tertiary education. But the indirect effects on institutions have been more profound. During the golden 1960s, staff without too much consideration to quality was recruited in order to cope with the enormous masses of undergraduates who had to be taught. This means that the typical college or university in many countries has a tenured faculty of which most members are in the age range 37–45. Since we can envisage that enrolment in absolute numbers will shrink considerably both at upper-secondary and university level, problems of allocating tenured faculty to useful tasks will be encountered. Turnover through retirement will be very low, and retired faculty will be replaced by younger colleagues. One need not spell out the consequences of this in terms of getting new blood into the university system and the ensuing arteriosclerosis that will block creative academic pursuits.

Over the last few years, there has been a discussion about the consequences of mass higher education on salary differentials, and on the rate of return to the individual of his investment in further education. To what extent has mass education, or as Richard Freeman (1976) puts it, 'over-education', resulted in lowering the rate of return to the individual for investing in higher education? Freeman himself presents evidence in support of his thesis that over-education brings about a reduced rate of return. Others deny this, and point at the stratification in terms of economic returns that successively has taken place between a more open and a more selective or closed sector in higher education (Teichler et al., 1976; Wahlck, 1980).

(3) The educational euphoria of the 1960s has turned into *criticisms and misgivings* about formal education to the extent that, by the early 1970s, prophets such as Ivan Illich (1970) who went as far as advocating 'de-schooling' were taken seriously. In many quarters, the school as an institution had until some 10 years ago been a sacred cow above criticism. Now the voices who talk about an 'institutional malaise' have become plentiful. The school for various reasons has become vulnerable to criticisms from both left and right.

Rising costs caused concern, not because many more students had to be taken care of but because the unit cost, the cost per student and year, has gone up considerably. As I have shown in my book, *The School in Question*, it increased in the City of Stockholm by some 60 per cent in constant prices over a 12-year period. As long as education was carried by the euphoria and could count on an increasing margin of economic resources, its costs were allowed to grow fairly uninhibited. But in a state of stagflation, cuts in expenditures have become necessary.

Secondary education has in many industrialized countries, which have made it universal or almost universal, become what an Assistant US Commissioner of Education not long ago called a 'disaster area', with

increasing absenteeism, vandalism, and turnover of teaching staff being some of the alarming indicators.

Concerns about standards have always been aired, not least by conservative school critics, because they often resist changes that broaden opportunities for entry into the system. But the problem of secondary school students with low or no motivation, whose absenteeism is an indication of 'voting with the feet', is a real one. Promotion has tended to become automatic, which is convenient for the teacher who can send the student to somebody else by promoting him to the next grade. After 9, 10, or even 12 years of schooling, it is discovered that the student cannot read and write even at the average low-grade level. We are beginning, not least in the metropolitan school systems, to get, I would submit, a new 'educational underclass' consisting of students who, right from the beginning of their schooling, were lagging behind and then successively are falling more and more behind. The legislation on minimum competency testing that has swept the United States like a prairie fire over the last few years is an indication of the concern about standards that citizens of all political convictions are beginning to express.

The climate in the school has over the last decade or so been increasingly affected by the fact that the school has tended to become a sorting and sifting device for the employment system and/or for the university system. We can in many countries note two paradoxes which characterize the present school scene. In the first place, in spite of the tremendous increase in the number of places available in institutions providing upper-secondary and tertiary education, competition for these places, at least those at the tertiary level, has become much more intense. Secondly, if students in the age range 13–16 are asked how they perceive school, we shall find, as we did in the IEA survey (Husén et al., 1973), that a sizable minority indicate that they hate school and would not remain there one single day beyond mandatory school leaving age. In spite of this, most of these negatively predisposed youngsters proceed to further education. The explanation for these paradoxes appears to me to be quite simple. Young people are keenly aware of the fact that their entry level on on the job market, as well as their place in the line of job-seekers on any level, is determined by the amount of formal education they have been able to absorb. Education is increasingly becoming a positional good and not merely a consumption good. Therefore, those who have not given up at an early stage try to 'stick it out', considering the reward that flows from doing so.

Education and Working Life

For a long time, education appeared to relate to the world of work in a rather simple way: it 'prepared' a person for entry into working life, and did so in a twofold way.

Firstly, jobs were perceived to be placed on different levels of

qualifications. The amount of formal schooling a person has been able to absorb determines the immediate level on which he makes his entry as well as the long-range level in the job hierarchy. A century ago, primary schooling was already considered necessary and adequate for the great mass of workers in manual occupations. University education has traditionally been required for the professions. Later, as a growing middle class of clerks and small business people emerged, a secondary school with its own qualification profile, which did not prepare for university entry, was established.

Secondly, public education at the pre-university levels began rather late to provide specific vocational preparation. In most industrial countries, vocational schools were not set up until well into the 20th century. Subjects or programs that aimed directly at preparing for specific vocations entered the educational scene later and were motivated by the usefulness of such schools for the national economy.

These two features dominated in a system where only a small select social elite went beyond primary education, and in a society with a very low social mobility. Until recently, the school served a society that was rather ascriptive both in terms of educational opportunities and job allocation. But profound changes have occurred in both respects over the last couple of decades. Lower-secondary education has become universal in most of the advanced industrial countries. In some countries, such as the United States, Japan, and Sweden, upper-secondary full-time education is approaching universality. If part-time attendance in formal institutions is taken into account, the Soviet Union belongs in the same category, at least in urban areas. Tertiary education under the designation of 'recurrent' or 'life-long', or simply adult education run by voluntary organizations, has become a mass movement. In my own country, there are now more part-time adult students in upper-secondary school than full-time young people in the proper age range of 16–19. University or college education in some countries has a participation rate that approaches or even exceeds the 50 per cent mark.

The system has at all levels tended to become more comprehensive not only in terms of enrolment but with regard to curriculum as well. The American comprehensive high school with its cafeteria-like course offerings spear-headed this development at the secondary level. At the tertiary level, we now have 'multiversities' or comprehensive universities, *Gesamthochschulen* as the Germans call them, in several countries.

Thus, the 'qualification pyramide' — as I predicted almost two decades ago, (Husén, 1968) — has changed into an 'egg-like' structure with a 10–20 per cent minority, the 'educational under-class', at the bottom with mandatory schooling only, then one-third to one-half with complete secondary education, and another one-third to one-half with tertiary education.

Until recently, young people who were first generation upper-sec-

ondary and/or university graduates could, at least in the long run, expect to get well-paid and prestigious jobs. Such employment was fairly easy to come by in a rapidly expanding economy with an even more rapidly expanding public sector where qualified manpower was in high demand but, until not long ago, in short supply. Thus, during the period of rapid growth of the educational system under the banner of equality of educational opportunity and social justice, many young people discovered that they could, through education, get access to high-level jobs which were far above the level that their elders had achieved.

The enhanced role of education as a sorting and sifting device for job placements has had profound repercussions on the teaching and learning process that goes on in the school. The school is not seen as an institution that provides a well-rounded, general education for self-realization but as a place to determine who is worthy of the more pleasant, prestigious, and well-paid jobs. In order to be among the select few admitted to prestigious institutions, one has to qualify by good achievements and grades. In such a context, schooling easily loses its own aims and is perceived primarily as a means of getting ahead in life. The ensuing competition and its repercussions on schooling right from entry into primary education have been analysed in my book, *The School in Question*. The absurd consequences of this have also been dealt with in that book, such as the ritualism and the emergence of the 'new educational underclass' of young people who fail at an early stage because they cannot compete with schoolmates with more favourable home backgrounds.

There are, moreover, consequences that affect the very relationship between education and work, that is to say, the *transition to adulthood*.

The enhanced level of formal education in the workforce has in many cases led to a reshaping of the work process which provides more leeway for individual initiative and job rotation. The self-steering groups in the Volvo automobile factory in Kalmar is one illustrative case.

(2) Another consequence is this. Until recently the formal system of education had certain *pivotal points*, where the individual's subsequent educational and, particularly, vocational career was determined once and for all. The so-called '11+ examination' in England for entry into grammar school, the upper secondary examination at 'A-level' which determines university entry, and the *baccalaureat* in France are cases in point. Those who failed the 11+, when it still was the universal screening device, had missed the grammar school train. Failing to pass the *bachot* in France or the *Abitur* in Germany meant exclusion from the university.

These rigidities have, after all, left room for more flexibility in terms of subsequent chances. Admission regulations for university entry have broadened the repertoire of credentials on the basis of which admission takes place. But the most spectacular thing that has happened is the launching of the strategy of recurrent education as a deliberate policy to

provide people, who primarily do not possess the academic qualifications and have spent some years in working life, with a second chance. This carries the potential of becoming the social revolution of the post-industrial society. The basic tenet of recurrent education is that the individual should have the chance to enter further institutional education at any point in his life and to weave the competencies thus acquired into his job career. He might want to improve his formal education across the board in order to qualify for entry into degree programs at tertiary institutions. Or he might want to take rather specific job-related courses that will improve his competence in his present work place and eventually grant him promotion there or at some other place.

The pragmatic and working-life-oriented features of the system of formal education in highly industrialized societies, with which I have dealt very briefly, are, I think most of us would agree, to be hailed as important improvements in terms of democratizing education, simply by broadening access to it throughout life. The opportunities have no doubt been extensively broadened and more flexibility in educational provisions has been achieved, although those who already have at least partial qualifications tend to be the first to take advantage of the new provisions.

But a largely vocationally-oriented system easily tends to clash with genuine educational values. After all, the overall mission for education is not primarily to prepare people for working life but to provide them with the notions, skills, and other competencies they need in order to become well-rounded, reasonably satisfied and participating citizens in a democratic society. An essential feature of a good democracy is to provide its citizens with *options,* not least options in the field of work. Nobody in our society should get stuck or have the feeling of being stuck with the first occupation he happened to enter after school. He should have the opportunity to change not only his particular occupation but his entire career as well. The main instrument for doing so is the education provided by public institutions.

Discrepancies between Rhetoric and Reality

What strikes a critical observer is the number of discrepancies between rhetoric and reality in today's school.

The official school policy in most of our countries is that the school system should promote equality of educational opportunity and thereby contribute to more equality in life chances. The reality revealed by any objective participation survey is that considerable gaps exist between rural and urban areas and between various social strata in countries with highly divergent social orders, be these capitalist or state socialist (Husén, 1975). The school fulfils in all these countries more or less the sorting function I have been talking about. It is there to impart distinctions and, to quote Orwell, those who from the outset are more equal than others succeed better.

As a result of the dissatisfaction with centralized bureaucratic control, often aired some 10 years ago in connection with student unrest, the official policy in many places became to strengthen the so-called grass-root influence by, for instance, bringing parents and students into decision-making or at least into advisory bodies. But financial control tended to remain with the central bodies who, by regulations about accounting and by exercising their right to audit, kept almost full control even over matters that were considered to be purely pedagogic and therefore had to be decided at the classroom or school level.

The most glaring discrepancies between rhetoric and reality are to be found in the curriculum and instruction domain. According to the official curriculum policy, the school should promote social education, for instance by group work. But attempts to establish a climate of co-operation and pursuit of learning for its own sake are thwarted by the competition between students that stems from scrambling for marks and preparation for examinations which determine the level in the work hierarchy and the place in the line of job-seekers at the level to which the student subsequently is allocated or selected. Students learn to work for external rewards, such as marks and examination scores. As pointed out earlier, much superficial ritualism is fostered in such a climate to the detriment of the pursuit of genuinely educational values espoused in curriculum preambles and guidelines.

In other contexts (Husén, 1974; 1979), I have tried to elaborate on the thesis that such discrepancies are part of the meritocratic syndrome that besets highly technological and growth-oriented industrial societies. They constitute part of the price that we pay for economic growth and increased material standard of living and are therefore at the root of modern post-industrial society. Pragmatism and cost-effectiveness tend to take precedence over learning for personal fulfilment. Little regard is paid to the intangible benefits that accrue to an individual who enjoys studying, for instance, history or literature — pursuits that would appear to be luxuries by educational planners bred in the spirit of cost-effectiveness.

It is easy to say that we need to change the entire social order or to espouse a Rousseauean recommendation of returning to the natural and innocent state of the past. A more modest recommendation would be to try to dissolve the connection between the educational and the employment system where the former is doing the sorting for the latter. Less emphasis on formal education in assessing employment qualifications would make it easier for us to cope better with the problem of the new educational underclass. This brings me to some final observations about reshaping the school as an institution for the future.

Reshaping the School for the Future

Among the overriding issues we encounter in attempts to reshape the school in order to make it a better and more humane institution for

achieving genuine educational goals, I would like to single out the size of the school units. Right from the beginning, I want to emphasize that I am not acting as an evangelist for some kind of 'small is beautiful' gospel. I simply want to question the tendency we find all over the world, particularly at the secondary level, to increase the size of school plants.

There are, of course, certain advantages with big school units that can be subsumed under economy of size. Course offerings and the options open to the students can be considerably broadened by having access to a diversified teaching staff which then requires a sufficiently large student body. Various services can be improved by having access to various specialists for medical and other services, such as a school nurse or a school psychologist.

There is no evidence that big schools tend to equip their students with a cognitive competence that considerably exceeds that of students in small schools. The price paid for the advantages already pointed out relates mainly to the social climate in the school. The heavy price lies in the field of social education. The bigger the school, the more impersonal formality creeps into it. When informal social control based on the face-on-face contacts that prevail in small organizations is difficult or even impossible to exercise, then all kinds of formal control, which require administrative machinery, have to substitute for it. Students in the big consolidated school have to be transported long distances to schools with an enrolment of a thousand students or more. The social climate of the school is heavily influenced by the noise level and the lack of stable and continuous relationships between students and the school staff, be it teachers, administrators, or service personnel. Absenteeism, vandalism, and mobbing thrive in a climate where direct social control is replaced by a system of formal regulations which can be violated without having to pay the price of embarrassment which is inevitable in a small setting.

I have dealt with the issue of school size because it represents *one* example of the necessity to rethink the ecology of formal education. Given the objectives set in the curricular guidelines for our schools, given the changing structure and role of the family, given the influence of the electronic media, and given the highly technological, complex, and meritocratic society in which we, and evidently the next generations, would have to live and learn to cope, we must begin to ponder what the optimal institutional conditions are for educating young people.

We cannot re-introduce the little red school house or a substitute for it. We can, however, do something that will in a large setting preserve some of its educational advantages. The proper starting point for any ruminations about this ought to be the recognition of *what characterizes the educative process.* At the core of it is the interaction between *two* individuals, the teacher and the student. The teacher has the task of planning, implementing, and checking the learning, both the cognitive and non-cognitive, that occurs in the student. His role is to provide the student with adequate

learning opportunities. This requires reasonably stable personal and emotional relationships that give the teacher an opportunity to build up confidence and motivation and to convey to the student the feeling that he cares about him. Clark Kerr (1977) has fittingly pointed out that young people today are 'redundant'. They are kept in school in order to be kept off the streets. They lack the feeling of being needed and being useful.

Such provision can without great problems be made during, say, the first five to seven years of schooling, but they become increasingly difficult to achieve when the curriculum in the following years offers options and special programs and subjects. But concomitant with the growth of the schools, specialization has crept into primary school, with so-called self-contained classrooms, right from the beginning of the first grade with special teachers for music, arts, gymnastics, etc. The excessive fragmentation of contacts tends at the secondary level to become adverse to any pedagogy of close teacher-student relationship when each subject specialist teaches his own particular field. In Sweden, we have found that the teaching contacts for a student in grades 8 and 9 are split up between some 15 teachers during the 35 periods of the weekly schedule. The fragmentation has become excessive also when it comes to services provided by medical personnel, social workers, and janitors.

The main problem, as I see it, is to establish a system where every student in the school has a teacher to whom he can particularly relate, a teacher who, in the ideal case, can serve as a *role model.* I would like to stress 'in the ideal case', but also emphasize that a minimum of personal commitment and interest in the problems of the individual student should be required from such a teacher.

To achieve such a pedagogy requires certain institutional rearrangements which affect such things as the scheduling of the school day and the allocation of teachers to various activities, both individual and collective. It also calls for a reshaping of teacher education.

Educators, in the first place teachers, have in several quarters been accused of being isolated from the problems of the so-called real world. Therefore the interest that economists, management specialists, and super-administrators have shown in school affairs has been hailed as a valuable attempt to bring the school into the societal mainstream. But these outside experts have gained their experience and their models from domains which are far from congruent with education. Educators are or should be concerned with helping young people develop their potential and to realize themselves. What this potential is and where the limits for self-realization lie become more or less apparent during the educative process and are largely unknown at the beginning of it. My point here is simply that school is *not* a manufacturing process, least of all a large-scale manufacturing process, where the unitary end-product is known from the outset and its production can be planned in detail.

Models derived from industry, including the principle of economy of

scale, are simply not applicable in education where we do not know from the outset what products we are going to end up with. This simple fact might cause some pedagogues frustration, but I hope that most of them perceive it as an exciting challenge which derives not least from the comforting realization of the need to live in a world where not everything is planned, nor should be allowed to be planned, by technocrats.

What role can be envisaged for educational research in the context I have tried to paint in broad brushstrokes?

(1) Educational research would have to devote greater efforts to diagnosing the institutional malaise from which particularly the secondary school of today is suffering. What features of the entire educational setting are problematic? What are the effects of school size, class size, diversity versus unity in the curricular set-up, teaching methods, and modes of assessing pupils' progress? How is the school related to the highly industrialized society at large? What are the relationships between the school as an institution and other educative institutions, such as the family and the media? Educational researchers would have to devote more interest to the ecology of education in the society of today, how the various types of educative influences interact and sometimes contradict each other.

(2) Futurological studies pertaining to reshaping the school as an institution so as to make it better meet the needs of the post-industrial society would have to be undertaken. In order to do this successfully, education should try to attract the most creative and imaginative minds from the social sciences and the humanities and have them take a fresh look at the problems with new research paradigms beyond the quantifications of modern positivism.

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14

Youth Unemployment and Its Educational Consequences

Henry M. Levin

Introduction

The problem of youth unemployment has become a serious dilemma throughout the western industrialized societies (Melvyn and Freedman, 1979). In this paper, I will focus specifically on youth unemployment in two countries, Australia and the United States, with particular emphasis on the relations between education and youth unemployment. To at least some politicians, the problem is essentially rooted in the alleged failures of the educational system. For example, the Prime Minister of Australia, Malcolm Fraser, has charged on several occasions that the Australian educational system simply does not qualify many youth for the substantial job vacancies that exist in that country (Colless, 1980; Fraser, 1980; Noare, 1980). But there are several competing explanations for youth unemployment, and each of these has profoundly different implications for policy. The purpose of this inquiry is to explore the rather different histories of youth unemployment in Australia and the United States and to evaluate the causes of the problem as well as some possible solutions.[1]

Before proceeding with these analyses, it is important to present the recent experiences of the two countries with respect to youth unemployment. In general, youth unemployment refers to the situation of persons below the age of 25 who are in the labour force, but lack productive work.[2] A component of youth that is particularly susceptible to unemployment is that of teenagers, so a separate evaluation is often made for persons between the ages 15 and 19 in Australia and 16 and 19 in the US. The seriousness of the youth unemployment problem in both countries as well as its increasing gravity in recent years is displayed in the table which shows unemployment rates for selected years and age groups.

Until 1974, Australia had a very low rate of overall unemployment at 2 per cent or below, and youth unemployment was only slightly higher,

Unemployment Rates for Selected Years and Age Groups — Australia and United States (Unemployed as Percentage of Civilian Labour Force)

Australia	Age			
Year	15–19	20–24	25 and over	All ages
1965	2.8	1.5	0.9	1.2
1974	4.2	2.4	1.1	1.6
1975	10.1	5.6	2.5	3.9
1979	17.0	9.3	3.7	6.2

United States	Age			
Year	16–19	20–24	25 and over	All ages
1955	11.0	7.0	3.6	4.0
1965	14.8	6.7	3.2	4.5
1973	14.5	7.8	3.1	4.9
1979	16.1	9.0	3.9	5.8

Source: Australian data are taken from Australian bureau of Statistics, *The Labour Force*, Canberra: various dates. US data for 1955–73 are taken from Norman Bowers, Young and marginal: An overview of youth unemployment, in United States Department of Labor, Bureau of Labor Statistics, *Young Workers and Families: A Special Section*, (Special Labor Force Report 233), Washington, DC: 1979, p. 5. 1979 data are calculated from United States Department of Labor, Bureau of Labor Statistics, *Employment and Unemployment during 1979: An Analysis*, (Special Labor Force Report 234), Washington, DC: 1980, Table 4.

with teenage unemployment of 3–4 per cent, and unemployment of those 20–24 years of age between 1.5 and 3 per cent. Between 1974 and 1975, the overall unemployment rate in Australia more than doubled, with an even greater absolute and proportionate increase in youth unemployment. All of these rates have continued to rise until, by 1979, teenage unemployment had risen to 17 per cent, that of 20- to 24-year-olds to over 9 per cent, and the overall rate of unemployment to over 6 per cent. In summary, there has been a precipitous rise in both overall Australian unemployment rates and those of youth in the latter part of the decade of the seventies.

In contrast, the United States has had consistently higher unemployment rates than Australia for all groups until very recently. Even in 1955, teenage unemployment in the US was 11 per cent and overall unemployment was 4 per cent. Over the last quarter century, the overall unemployment rate has increased from 4 per cent to just below 6 per cent with large fluctuations over the business cycle. Teenage unemployment has increased over this period by about the same proportionate change, an

increase from 11 per cent to 16 per cent, and the unemployment rates of 20- to 24-year-olds have increased from 7 to 9 per cent.

The patterns in the two countries show both similarities and differences. For both countries, youth unemployment has generally moved in the same direction as adult unemployment, only the former has become more serious relative to the latter in recent years. In 1965, the teenage unemployment rate was about three and one half times as great as that for persons 25 and over in the US and about three times as great in Australia. By 1979, these ratios had increased to about four for the US to over four and one half for Australia, suggesting a tendency for the teenage unemployment rate to rise at an even faster rate than that of adults. There is also evidence of relatively greater deterioration in unemployment rates for 20- to 24-year-olds when compared with those 25 and over.

Indeed a related similarity is the remarkably low level of adult unemployment in both countries. As youth gets older, the probability of their facing unemployment declines considerably, a matter that we will return to when we consider why youth unemployment is a problem. Despite these similarities in youth unemployment patterns between the two countries, there is one major difference. Problems of high overall unemployment and youth unemployment are relatively recent phenomena in Australia in comparison with the US. For example, in 1965 the US overall unemployment rate was 4.5 per cent and that of teenagers was almost 15 per cent. In the same year, the corresponding rates for Australia were only 1.6 per cent and 4.2 per cent. But, by 1979, Australia had unemployment rates in both categories that exceeded those of the US.

Why is youth unemployment considered to be such a serious problem? After all, it is just a matter of time before youth reach the age where the probability of unemployment reaches the national average, generally five or six years at the most. There are several reasons for social concern. At the very least, youth unemployment rates are high in relation to any reasonable standard, and there is good reason to believe that the situation is getting worse. But there are other aspects that tend to underline the gravity of the youth situation.

First, it is feared that youth unemployment may have profound effects on altering values and attitudes of the affected persons and make it increasingly difficult to integrate them into both social and economic institutions. Historically, the western industralized nations like the US and Australia have had relatively high rates of employment with jobs available for almost all who sought work. Clearly this has been less true for the US than for Australia, but now both countries are confronting youth with an increasing probability of unemployment. Even the present rates of unemployment understate the true situation because they do not include the so-called discouraged worker who has given up looking for work because of poor employment prospects.

Youth who face a situation of unemployment for prolonged periods are

likely to be angry and frustrated at their inability to find productive employment. This frustration may undermine their respect for traditional social values in a society that cannot provide employment to those who desire and need jobs. Such cynicism may contribute to various forms of antisocial behaviour such as vandalism, crime, drug use, and alcoholism. Indeed there is a danger that a sub-culture of cynical and destructive youth could become a major by-product of massive youth unemployment.

Second, even though the probability of unemployment falls very rapidly as youth approach their mid-twenties, there is a concern that periods of youth unemployment may have longer-term consequences on earnings and job performance. For example, some persons may become so accustomed to working irregularly or not at all that they may develop anti-work attitudes. Others will lack the early experiences in the labour market that provide the background for later career mobility, and they may be relegated to lower level positions for their entire careers. Others yet will simply never catch up to their colleagues who were more fortunate in obtaining jobs at the time of leaving school. There is at least some evidence of the long-run damage of youth unemployment in the US where statistical studies of workers show that earlier periods of unemployment for black youth are associated with lower earnings in later years when regular employment patterns are established (Becker and Hills, 1980; Ellwood, 1980; Corcoran, 1980).

A third aspect of youth unemployment is that it has important implications for equity among races, sexes, and persons drawn from different social classes. The probability of unemployment among youth is hardly a random event that affects all social groups equally. In the US, it is heavily concentrated among the black people and persons drawn from the least advantaged educational and social backgrounds. For example, although about 14 per cent of white males and females in the 16- to 19-year-old category were unemployed in 1979, black males and females in this age range faced unemployment rates of 36 per cent and 39 per cent respectively (US Department of Labor, 1980: A-6–A-7; Mangum and Seninger, 1978; Newman, 1979). Likewise those with the lowest educational attainments and whose parents have low incomes and occupational status are more likely to be victims of the youth unemployment phenomenon than those with more education and from more advantaged families (Rees and Gray, 1980). Indeed 50 per cent of all teenage unemployment in the US seems to be concentrated among only 10 per cent of teenagers, and these are predominantly those with the least education and other resources (Freeman and Wise, 1979:8; Clark and Summers, 1980). In Australia, too, it is recognized that the early school leaver is especially subject to unemployment (Williams, 1979), and that such persons are typically concentrated among the lower socioeconomic groups (Karmel, 1979:6). Thus basic patterns of economic and social inequity are mirrored in the patterns of unemployment among youth, where those

who derive from the least advantaged circumstances are also those who are most susceptible to youth unemployment.

A final reason for social concern is the effect that youth unemployment has on the schooling process itself.[3] To the degree that one of the principal reasons for pursuing secondary schooling conscientiously is the expectation that it will lead to reasonable employment prospects, high rates of unemployment are likely to have an impact on the behaviour of students. At the very least, it may be difficult to keep such students motivated to undertake educational experiences that are not intrinsically interesting to them. Problems of student discipline may rise in response to a frustration with both the educational process and its falling currency as a ticket to employment. Under certain circumstances, high youth unemployment may also lead to reduced incentives for secondary school completion.[4] In Australia, in particular, there is evidence in recent years of declining rates of secondary school completion among males (Karmel, 1979:5).

In summary, high levels of youth unemployment are troubling for Australia, the US, and other industralized societies for several reasons. First, the phenomenon undermines a traditional expectation and implicit right of youth that jobs will be available to all who wish to work. This means that many youth will suffer through protracted periods in which they are unable to find productive work, and these experiences may create a cynicism and anti-social set of attitudes and behaviour among those who are affected. Second, youth who experience substantial unemployment may also experience lower future wages and career mobility as a consequence, even when they are able to obtain regular employment as they reach adulthood. Third, there are important equity implications in that persons from the least advantaged social backgrounds are most heavily impacted by youth unemployment. Finally, substantial prospects of unemployment among youth may affect schooling patterns by reducing the incentives of youth to adapt to the demands of the educational system and to complete secondary school.

Causes of Youth Unemployment

As with so many complex social phenomena, there are many explanations for youth unemployment. Each view competes for adherents with the others, and each suggests a rather different policy approach to addressing the problem. In this section, we will review the four main explanations for youth unemployment. Before proceeding with this comparison, it is important to mention two aspects of youth unemployment which are often sources of analytic confusion in trying to assess the phenomenon.

The first source of confusion on evaluating the major causes and cures of youth unemployment is the rather common difficulty of mixing analyses at two different levels of social aggregation. Most of the literature

that addresses youth unemployment views it as a macro-level phenomenon in which the concerns are expressed on a societal level. That is, they ask what are the causes of the *overall* magnitude of youth unemployment, and how can it be reduced? But, it is also possible to ask why certain youth are more susceptible to unemployment than others and to explain differences in the likelihood of unemployment among individuals. That is, one can ask why certain types of *individuals* are more likely to be unemployed than others, and what can be done about it.

The major error that arises when the two levels of analysis are confused is the application of findings on the determinants of unemployment among individuals to solutions for alleviating the overall problem of youth unemployment. For example, it is clear that individual youth with low educational accomplishments are the ones most likely to suffer from unemployment, while persons with higher educational attainments suffer the least. Therefore, from the perspective of the individual young person, obtaining more education will reduce his or her probability of unemployment. However, it does not follow from this that when everyone obtains more education than the average the amount of youth unemployment will be diminished or that the level of employment for the labour force will rise.

The individual who obtains more schooling is simply likely to displace one with less schooling in the overall job queue. In this case, the understanding of differences in employment prospects among individuals cannot be used to address employment prospects for large groups (Thurow, 1975). Improving the prospect of one individual may simply serve to displace another from the existing pool of jobs. Without an aggregate increase in the size of the job pool itself, increasing the probability of employment of one individual cannot be done without jeopardizing that of another. Thus, the employment solution for an individual youth is not an appropriate basis for addressing the overall problem of youth unemployment.

A second area of potential confusion in evaluating the causes of youth unemployment is that most of the evidence is based upon comparing the trend of youth unemployment over time with the trends of various potential determinants. Over the past decade and one half, there have been increases in the population of youth, aggregate unemployment, minimum wages, and unemployment compensation and decreases in measurable educational standards. Since all of these are considered to be factors that may affect the magnitude of youth unemployment, it is possible to construct a case for any one of them by just asserting the coincidence of time trends. That is, it can be argued that it was an increase in the minimum wage or in the demography of youth or a fall in educational standards that explains the rise in youth unemployment by virtue of the fact that changes in each of these tend to coincide with changes in youth unemployment.

But such an interpretation may be quite erroneous. First, since all of the potential determinants have followed a similar time trend, it may be difficult to separate their unique impacts on youth unemployment.[5] Second, it is possible that a common set of forces has influenced the behaviour over time of both the potential determinants and youth unemployment, so that there is no causal pattern at all. In this case, any inference about causality becomes hazardous, since a common time trend will have affected all of the data. The main conclusion that can be drawn from this discussion is that the precise timing of the trends as well as supportive evidence that is drawn from other sources must be used to determine the validity of any causal inference. The fact that the general time trend between a potential explanatory factor coincides with rises in youth unemployment is not sufficient evidence in itself to support a causal relation.

There are four leading causes of youth employment that are asserted in the literature: the demographic bulge of youth entering the labour market in recent years; minimum wages for youth that exceed the value of their productivity or make them non-competitive with adults; a deterioration in education and training in recent years; and poor economic conditions under which youth suffer more than their older peers. All of these may have some basis, but it is important to ascertain which are the dominant causes from a policy perspective. That is, if some of the explanations account for only a small portion of the increase in youth unemployment and others account for most of the increase, the policy solutions should focus on the implications of the major explanatory factors rather than give them all equal weight.

In what follows, an attempt will be made to review each explanation in three parts. First, a presentation and analysis of the explanation will be made. That is, what is the causal link between a particular phenomenon and youth unemployment? Second, the appropriate policy solution that follows from the explanation will be delineated. That is, how can public policy be used to intervene to improve the situation? Finally, a presentation will be made of the evidence supporting the particular explanation as well as an evaluation of that evidence. By reviewing systematically each of the four explanations, it is possible to draw some tentative conclusions about both the causes of and possible solutions for youth unemployment.

Youth Demography

One of the most popular explanations for the deteriorating situation of youth in labour markets is that the sheer number of young persons entering the workforce tended to increase at a much faster rate than they could be absorbed. Especially important in this respect was the effect of the baby boom that followed World War II. The sixties and seventies were characterized by rather large increases in the number of persons in the 16- to 24-year-old age range. Although the increase in such persons could

normally be handled by the labour force over the long run, it has not been possible to absorb them over the short run. Accordingly, youth unemployment rates have risen dramatically in the seventies.

The main policy solution that is associated with this explanation is that of patience. That is, although there has been a temporary bulge in the number of youth seeking work, it will fall as the youth population declines in both absolute and relative terms. Thus, if we wait long enough to get over the effects of the baby boom on the labour market, unemployment rates for youth will decline. In addition, any policy that can delay youth from entering the labour market at such times can also be helpful. Education and training programs and expansion of the military that will reduce the supply of youth searching for jobs can have such an effect.

The evidence supporting the view that youth demography is a principal cause of youth unemployment is singularly unimpressive. In the case of Australia, the population aged 15-19 grew dramatically from 9.2 per cent of the population aged 15 and over in 1954 to almost 13 per cent in 1966.[6] By 1971 the population aged 15-19 had fallen to 12.2 per cent, and continued to fall in the latter seventies when youth unemployment experienced its most marked increases (Burke, 1980: 9, Table 4). The highest levels of increase of the youth population were associated with the lowest levels of youth unemployment.

For the US, the explanation is equally unconvincing as a dominant one. First, a pure demographic effect would have resulted in poorer employment prospects for all youth. Yet, despite large increases in the number of white youths in the population, the percentage of that group that was employed actually increased between 1969 and 1977, while the employment rates of black youth as a percentage of their population decreased profoundly (Freeman and Wise, 1979:6; Ginzberg, 1980; Bowers, 1979; Newman, 1979). That is, to a large degree it was the employment opportunities of black youth that deteriorated rather than all youth. This suggests that there was no 'pure' demographic effect, since by at least one measure (employment as a proportion of population) the situation of white youth actually improved. Second, by the latter seventies, the youth population had begun to stabilize as a proportion of the population with a forecast for a relative decline in the eighties. Yet there was no evidence of improvement in employment prospects during this period.

In summary, while the demographic situation may have accounted for some increase in youth unemployment, it does not appear to be a major cause. The time patterns of increase in the youth population do not coincide well with the levels of youth unemployment in either Australia or the US. Indeed youth unemployment had been high in the US over all phases of the demographic cycle, and in Australia the demographic bulge preceded the present youth unemployment crisis.[7] Further, the fact that there is a distinct racial pattern to the increase in youth employment and unemployment in the US, in which employment/population ratios of

white youth have actually improved while those of nonwhites have deteriorated, suggests that the demographic explanation has little generalizable power. That is, the explanation requires assumptions about racial separability of labour markets to be even moderately plausible.

Minimum Wages

A second explanation is that minimum wages for youth have tended to price them out of jobs, since their productivity is not adequate to justify such wages. This explanation is based upon the assumption of perfectly competitive labour markets in which it is assumed that workers are paid the value of their contribution to production. Given high minimum wages for youth who are not productive enough to earn such wages, employers will tend to hire older workers and provide more capital investment in plant and equipment in place of youth who might otherwise have been hired at a lower wage. The solution that follows from this explanation is to reduce the minimum wage for youth by creating a two-tiered minimum wage system (Coleman et al., 1974:168). Under this system, employers would provide a lower minimum wage for youth than for adults. Presumably, more youth would be hired, and they would receive the lower minimum wage only while receiving job experience and training. By the time their productivities had risen to a level commensurate with higher wages, they would be eligible for the higher adult minimum wage or market forces would have caused their remuneration to rise to a level above the minimum wage.

The effect of minimum wages on youth unemployment is difficult to assess, since there are a number of possible relationships. First, if the minimum wage rises, it is possible that 'more productive' adults will be preferred to youth so that youth will lose jobs to adults. Second, if the minimum wage rises, it is possible that employers will substitute more capital-intensive methods of production for all employees. Third, there is the possibility that the effects of the minimum wage will not be felt immediately, because it takes a while for employers to make adjustments. Even so, the view that youth unemployment has been largely attributable to rises in the minimum wages seems unlikely for both Australia and the US.

In Australia, the best evidence to support the effects of a rising minimum wage are that, between 1971 and 1974, the relative weekly earnings of junior males (under 21) rose from 52.4 to 55.9 per cent of that of adult males (Burke, 1980:Table 3). Beginning in 1975, there was a precipitous increase in unemployment rates of youth, possibly stimulated by the earlier rises in youth earnings. However the pattern tends to be contradictory. For example, after 1977, the ratio of junior to adult earnings declined slightly, but unemployment of 15- to 19-year-olds rose from 15.2 per cent to the 18 per cent range by the beginning of 1980 (Burke, 1980:Table 2; ABS, 1980:3). Further, the earnings of female juniors

relative to female adults had changed scarcely at all between 1966 and 1978 (Burke, 1980:Table 3). Yet female unemployment among 15- to 19-year-olds has followed the same pattern as that for males, rising from about 4 per cent in 1966 to over 20 per cent in 1979 (Burke, 1980:Table 2).

For the US, the evidence is equally anomalous. Most important is the fact that the earnings of young males relative to adult ones *declined* rather substantially between 1967 and 1977, regardless of rises in the minimum wages (Freeman and Wise, 1979:12). That is, the poor labour market conditions faced by the young seemed to have their effects not only on unemployment rates, but on the relative earnings of youth as well. Further, the rapid increase in prices in the seventies meant that the minimum wage was no higher relative to the median wage than it was in the preceding two decades (Gamlich, 1976). Finally, even the largest estimate of the effects of minimum wages on youth unemployment is rather small, given the magnitude of such employment.[8] Taken together, these findings suggest that minimum wages in both Australia and the US do not seem to be dominant factors in explaining youth unemployment in recent years.

Education and Training

A third explanation for the rise in youth unemployment is the view that the quality of the youth labour pool has declined in recent years by virtue of a deterioration in education and training. According to this explanation, youth are increasingly lacking in the skills that are required for productive work. As the Prime Minister of Australia explained in a speech given in August 1980, there is a rather straightforward explanation for the 'paradox of high youth unemployment co-existing with the growing shortage of skilled labour' (Hoare, 1980). If the educational system were to do its job in creating a more qualified youth population, such youth would not face unemployment (Hoare, 1980).

If youth unemployment were a function of the low skills of the unemployed, the policy solution would be straightforward. Schools would need to be improved to make certain that they met the standards of employers, and training programs would have to be established and/or refurbished to address directly the types of skills that were needed in labour markets. That is, just as the US War on Poverty of the sixties was largely fought on the beachheads of schools and training sites by an infantry of educators and training supervisors, the enemy of youth unemployment would be vanquished by a similar policy onslaught. The answer to youth unemployment and training would be to improve the effectiveness of the education and training system.

Three types of evidence seem to be used as a basis for the assertion that youth unemployment has risen in response to a deterioration in the

education and training of youth. First, it is pointed out that the job situation is worse for persons with low educational attainments than for those with greater ones. That is, jobs are available for those with better education. Second, employers have complained about the performance of young workers (Williams, 1979:Vol. 1, 618). Finally, there is widespread discussion and some data that suggest that educational standards have been declining (Wirtz et al., 1977).

It is generally true that more educated youth are less likely to face unemployment than less educated ones. It has also been claimed that jobs are becoming more and more complex and are requiring ever increasing skill levels.[9] When these two are taken together, it is only a small step to conclude that youth unemployment is simply a function of an increasing number of young persons who lack the education for work in an increasingly sophisticated work place. This view rests on the premise that more jobs are available than qualified young persons to fill them.

Virtually all of the available evidence for both Australia and the US suggests that this is not the case. In order to explore claims of a shortage of skilled labour, the landmark Williams inquiry did a special survey of the Australian labour market for 1977/78 (Williams, 1979:Vol. 2, Appendix M). In the middle of 1977, it found that for every unfilled vacancy in the skilled trades, there were five adult males registered as unemployed in those trades (Williams, 1979:458). Further, the pattern was similar in all major trade areas. To the degree that there were openings, they were attributable primarily to a regional mismatch of demand and supply, and even these amounted to only 1.3 per cent of all jobs (Williams, 1979:468, 474–97). Further, the vast majority of these unemployed lacked work because it was unavailable rather than because they lacked qualifications for the jobs that they sought (Williams, 1979:493).

In addition to the shortage of jobs, it is highly doubtful that existing entry-level jobs are too advanced for the young. There is considerable evidence that one of the major effects of automation has been the constant deskilling of jobs, and particularly ones where computerization has replaced human judgment.[10] Indeed, the job behaviour of youth and the high quit rates may be a response to the lack of challenge represented by the routinization of so many jobs as well as the lack of a career ladder (Brown, 1980). Thus, if the skill requirements of jobs that have been filled traditionally by youth are declining and the opportunities for advancement and higher wages are also diminishing with technological change, it would not be surprising to find that the response by youth was a deterioration in job performance. But, paradoxically, this phenomenon may result from education and skill levels of youth that are too high for available jobs rather than too low (Rumberger, forthcoming).

In any event, data on the determinants of unemployment for individuals cannot be generalized to that of all of the unemployed as we

stated above. Although a person with more education is less likely to be unemployed, it does not follow that a high-enough level of education for all youth will eliminate unemployment. That is, one must not confuse the factors that explain the distribution of unemployment with its causes. It must also be shown that enough jobs will be forthcoming to employ all job seekers, and this assurance is noticeably absent from such analysis.

Finally, there is the rather widespread view and some evidence to show that educational standards have fallen. Although this view is found in both Australia and the US, the data are widely available in the US (Wirtz et al., 1977). Indeed the Australian case is immediately suspect when one considers that the youth unemployment explosion began rather suddenly in 1975 rather than developing over a longer period of time in response to a longer-term education deterioration. Since there is no evidence in Australia of a sudden decline in educational standards over a one- or two-year period preceding the 1975 rise in youth unemployment, the relationship seems implausible.

However, in the US, there is evidence that student performance on standardized tests administered at the secondary level has shown a continuous decline since the late sixties (Wirtz et al., 1977). To the degree that these test scores serve to reflect student job skills, it might be argued that a larger and larger group of students leave secondary schools without the skill to obtain productive work. Of course, there is a great deal of debate about what the test score declines actually mean.[11] However, even if we accept this evidence as reflecting a true decline in the job skills of the young, there is the larger issue of cause or effect. That is, are the declining test scores a response to the deteriorating employment prospects or are they the cause of it? It is probably reasonable to assume that most students in secondary school pursue their studies, not because of the intrinsic value of the educational experience, but because of compulsory attendance laws and the expectation that what is learned will have value in the labour market. This is the principal reason that many students are willing to tolerate the boredom of the classroom and the discipline of the school. It is expected that at least a tolerable level of effort is necessary to succeed well enough in school to have access to a decent job.

Thus, a rather different interpretation of the relation between youth unemployment and falling test score performances of youth is that youth are devoting less effort to the traditional requirements of secondary education as the payoffs to such schooling decline. In the US, this phenomenon may be exacerbated by the increasingly relaxed admissions policies of colleges and universities as they scramble for a relatively smaller number of students in the aftermath of the record enrolments created by the baby boom generation. College admission is no longer as competitive a phenomenon as it was in the sixties, as students are successful in gaining access to institutions of similar status with lower test scores and poorer achievement in traditional academic subjects. Under such condi-

tions, the incentives to devote long hours to study and to pursue some of the more difficult elective courses have subsided.

In summary, the view that a decline in education and training standards relative to skill requirements of jobs is responsible for youth unemployment seems to have little support. The sheer scarcity of jobs for both youth and adults suggests that, at best, education may be used as a rationing device to determine who has greatest access to available employment. But this does not mean that more jobs would be forthcoming for all youth or adults with higher educational attainments. Moreover, falling test scores seem to be more of a response to the depressed job market for youth than a cause of it.

Poor Overall Economic Conditions

This brings us to the fourth explanation of youth unemployment, that of poor aggregate economic conditions. This explanation suggests that as unemployment rises generally in the economy, youth are particularly vulnerable because of their lack of training and experience. Firms tend to be more willing to retain their experienced workers than to keep ones with low seniority or to hire new ones with no experience. Further, a lack of hiring will mean that those persons just entering the labour market will be most affected by the paucity of new opportunities. Thus youth can be expected to suffer more from aggregate unemployment, with rates that exceed considerably the average level of unemployment. Under such a situation, there will simply be far more persons seeking jobs than available positions, and youth will have the least access to the openings that do exist.

The policy solution for high levels of general unemployment is to stimulate the economy through monetary and fiscal policies. More specifically, expansion of the money supply and planned deficits in the public budget have been used in the period since World War II to increase the level of national income and employment in virtually all of the western industrialized societies. In addition, specific programs for creating jobs for young persons through public employment and subsidies of jobs in the private sector would be used to augment the macro-economic solution for stimulating the economy (Palmer, 1978; US Congressional Budget Office, 1977). These policies are, themselves, fraught with problems which will be discussed in the next section. But, if unemployment results from an economy which is operating below capacity, policies to stimulate the economy should increase employment along with those designed to augment particularly the job demand for youth.

The evidence that poor aggregate economic conditions and overall unemployment comprise the primary determinant of youth unemployment seems to be the most convincing single explanation. It is clearly the only explanation that fits closely the timing of changes in youth

unemployment and its magnitude. As the overall unemployment rates for the two economies have varied, so have rates of youth unemployment. That is, youth seem to be the principal victims of the aggregate economic situation as reflected in the table, Unemployment Rates for Selected Years and Age Groups, and the more detailed time series describing the age composition of unemployment. For the US a one percentage point rise in the adult male unemployment rate is associated with a 4–6 per cent decrease in the proportion of males in the 16- to 19-year-old group who are unemployed (Clark and Summers, 1980:4). That is, youth tend to bear a disproportionate share of increase in unemployment.

This finding is further buttressed by a study of employment rates of young males in major metropolitan areas of the US for 1970. In that study, an attempt was made to explore the relationship between adult unemployment in metropolitan areas and teenage employment patterns. With each one percentage point rise in adult male unemployment among metropolitan areas, there was a fall in the proportion of youth who were employed of 3–5 per cent with the largest negative impacts on teenage unemployment (Freeman and Wise, 1979:10).

The evidence on this point is so compelling that a recent analytic report on the youth labour market by the US Department of Labor concluded:

> Perhaps the most significant fact about the youth labor market from a policy viewpoint is the severe disruption brought about by declining aggregate economic conditions. The initial job is more difficult to procure, young workers are more likely to be pushed out of their jobs, the duration of unemployment is extended, and wage growth is depressed. (US Department of Labor, 1979: 163–4)

In summary, although four principal causes were posited for explaining the rise of youth unemployment in Australia and the US, the deterioration in overall economic conditions in the two countries seems to be the most important determinant of the phenomenon. The increase in the relative numbers of youth in the labour market, minimum wages, and declining educational standards may have had some impact, although the evidence on each tends to be contradictory. However, the state of the economy has shown a consistent and substantial relationship to youth unemployment, and it can be concluded that it is the key factor.[12]

Policy Directions and Education

According to the preceding analysis, the problem of youth unemployment is unlikely to yield to an educational solution for the reason that it is not primarily an educational dilemma. Rather, it is attributable in large measure to an economy that has provided fewer jobs than there are jobseekers. In this section, we will explore possible policy directions with respect to how to address youth unemployment, with special emphasis on the possible educational aspects. An underlying aspect of the discussion is

the assumption that educational and training programs can only be a part of the overall solution, not the central solution.

Aggregate Economic Policies

The usual response to unemployment and low economic growth in societies like Australia and the US is to stimulate the economy through both fiscal and monetary policy. By increasing the effective demand for goods and services through reducing taxes and raising government expenditures as well as by expanding the availability of credit and the money supply, the output and employment of the economy are expected to rise. Since youth unemployment is closely related to overall economic conditions and the rate of unemployment, the unemployment of youth could be expected to fall as general economic conditions improved.

But, in recent years, there have been limits to the ability to stimulate the economy through monetary and fiscal devices. Perhaps the most important obstacle has been that of high levels of inflation. Expansionary policies tend to trigger higher price levels by increasing both demand for goods and services and by creating tighter labour markets that enable workers to obtain higher wages. Even in the absence of expansionary policies in the US and Australia, increases in the price level have been substantial and troublesome.[13] There has been a reluctance to push for expansionary policies that will increase imports and raise prices of exports at a time of chronic deficits in the balance of trade. Further, monopoly concentration in both economies has meant that the responses to rising demand may be bottlenecks and shortages in some sectors with continuing problems of overcapacity in others, while multinational firms ignore national priorities by pursuing an international rationalization of production that will maximize their profits.

A fuller response is to combine monetary and fiscal policy with the active labour market approach that has been developed most fully in Sweden, but has been emulated in most of the industrialized countries including Australia and the US. Such an approach acknowledges that aggregate economic policies in themselves will not work appropriately to address unemployment and low economic growth, unless they are augmented by other policies that will address structural problems in the economy (Rehn, 1980). Thus monetary and fiscal policies are supplemented by subsidies to particular industries and firms in depressed regions, by substantial investment in training and retraining programs, by public employment programs and public subsidies for private sector jobs[14], by substantial public assistance for the unemployed, by tax incentives and other promotional assistance for export industries, and by possible trade barriers on a selective basis against imports that threaten national industries.

For the foreseeable future, policies like these will be used to address unemployment in Australia and the US with clear limits to their potential

success. In part the limits derive from the fear of inflationary effects, and in part from the political realities that constrain such policies. Increases in public spending must come from either higher taxes or greater public debt. The former response invites taxpayer opposition and revolt, and the latter tends to fuel inflation. Further, it is difficult to pursue national labour market policies, if substantial numbers of the firms that participate are multinational in nature. The latter firms have not only the options available to them in a given society, but also potential options around the world. This means that they may seek subsidies as a form of blackmail to maintain their production facilities in a particular country or set governments against each other in the competition to provide incentives for plant location or expansion.

Further, job-subsidy programs for the private sector may simply provide support for those firms that were already expanding employment. That is, at any given time some sectors will be expanding and others receding, and the same is true for firms. To a large degree, subsidies that are provided for 'new' jobs will simply support jobs that would have been forthcoming in any case. In addition, the political realities are that the large corporate firms are more likely to receive subsidies, loans, and other incentives than small businesses. The reasons for this are not only the greater political power of the larger firms, but also the relatively substantial employment or unemployment effects of changes in such entities. Relatively speaking, the employment intensity of small businesses is generally far greater than larger ones, and an equal subsidy to the small business sector is likely to absorb more of the unemployed than one to large businesses (World Bank, 1978). But small businesses lack the political power of the multinational corporate behemoths.

In summary, to the degree that active labour policies are used to promote economic growth and full employment, they are limited by their inflationary potential and a political process which supports certain industries and sectors at the expense of others. Although investment in the less capital-intensive small business sector is likely to create more jobs than investment in the corporate sector, political realities favour the largest entities. Moreover, active labour market policies are limited by their relatively high tax requirements; for, when economies are suffering from low economic growth and underemployment, there is likely to be a large resistance to rising taxes. Thus the future of active labour market policies for substantially reducing youth unemployment can hardly be viewed as an optimistic one.

Education and Youth Unemployment

Given this general background on aggregate economic policies to address unemployment, it is appropriate to return to the specific policies for reducing youth unemployment with special emphasis on educational concerns. However, it is important to point out the two major choices before

us. Given a dearth of available jobs, many job seekers will be unemployed at any one time. As some get jobs, others will be displaced from work. In both Australia and the US, such unemployment is not distributed randomly among different social groups. Rather its burden is vested heavily among youth, and in the US among non-white youth.

There are two ways to reduce youth unemployment. The first is to improve overall economic conditions so that all groups, including youth, benefit. The second is to create programs exclusively for youth, often at the expense of older workers. Most concrete suggestions for improving the employment situation of youth tend to follow the latter strategy; that is, to redistribute the burden of unemployment from youth to adults. For example, it has been suggested that the employment of youth would be more attractive in Australia (Corden, 1979) and the US (Coleman et al., 1974:168) if youth were eligible for a lower minimum wage.

It is true that the provision of a lower minimum wage for youth is likely to shift jobs from low-wage adults to lower-wage youths. But, in the US, even the present minimum wage for full-time adult workers is not adequate to provide a standard of living for supporting a small family above poverty levels. Yet a dual minimum wage would reduce employment among such adults to provide more jobs for youth. Further, when public employment and subsidized jobs in the private sector are targeted for youth, this is necessarily done at the expense of adults who might have received those benefits. Even more to the point, education and training programs that give youth a greater competitive edge in the labour market will ultimately have the effect of displacing adults who would have received these jobs.

In fact, the most distressing aspect of youth employment programs is that, if they are successful at getting youth employed, they must necessarily create unemployment for other groups. Whether this is good public policy is obviously a normative issue. That is, one could argue that the terrible dilemma of youth unemployment requires that, at the very least, other parts of the population share the burden of inadequate employment.[15] Therefore, by equalizing the burden among all groups, there is a fairer outcome. However, the counter view is that, as bad as the situation is for youth, it is even worse when adults are unemployed. Youth typically have few financial responsibilities beyond their own personal needs, and they are often able to obtain room and board and other types of assistance from their parents. In contrast, adults have heavy financial obligations and other responsibilities associated with the support of other family members and health problems that arise as one gets older.

Given a movement towards a more pro-youth policy, targeted education and training programs for youth will certainly have some effect on improving the position of youth in labour markets. While such educational and training programs have not shown notable success in the past — often because training has taken place in fields where there is already

a surplus of job-seekers — it certainly would seem possible to improve their performances.[16] Foremost in improving these programs would be more careful attention to matching the actual needs of the labour market with the training required to perform well in those jobs. Even better would be a job-contracting approach between training centres and employers, that committed employers to take a minimum number of trained youth who met particular skill requirements. However, even these gains by youth would tend to be at the expense of older workers who had not received the training.

A second type of educational approach is that of using educational leave programs as ways of increasing the number of labour market openings. A number of countries in western Europe have initiated programs of paid educational leave, where workers have a right to a periodic period of study that is paid for out of a fund that is financed by a payroll tax on employers and employees (Von Moltke and Schneevoight, 1976). Presumably, educational leaves provide a means to upgrade the skills of workers while creating openings for new workers to replace those who are taking such leave. Indeed, in Holland, this approach is seen as an important tool for actively promoting a reduction in unemployment (Emmerij, 1979). Since the plan is based upon a voluntary rotation of the labour force in which those on leave improve their own skills, it tends to increase the welfare of both the persons on leave as well as those who gain employment by these policies. The biggest obstacles from a social perspective are matching the needs of employers with the available supply of unemployed workers as well as finding new positions that will use the training of those who return from educational leave.

Another voluntary approach to increasing employment opportunities for youth through education would be to promote, to a greater extent, careers that enable part-time employment in combination with part-time study. The advantage of such a plan would be that a larger number of youth would be able to obtain job experiences through job sharing, while still enabling further training and education on a part-time basis. In both Australia and the US, the incentives tend to be patterned in the direction of full-time work or full-time employment. On the employment side, many employers seek full-time workers for jobs rather than considering the sharing of jobs among two workers. Further, student subsidies and scholarships are typically limited primarily to full-time students on the basis that the part-time student already has adequate financial support from his or her work. By designing public policies to encourage more part-time opportunities in both public and private employment and the provision of student subsidies for part-time study, it is possible to increase the number of youth in both the work place and schools.

Finally, the gravity of the youth unemployment situation calls for bold new approaches to both job creation and training. One possibility would be the establishment of youth producer co-operatives, firms that would be

both owned and democratically managed by their workers. Such establishments would cater for young persons by requiring that half or two-thirds of their positions be allotted to workers under the age of 25. The reason for including older workers would be to provide a core of experienced workers to create stability in the firm and guidance for those with less experience. The fact that these firms would be owned and democratically operated by their workers would create strong attachments of workers to the work process because all would share in the success of the enterprise. Further, the shape of the work environment would be determined by the workers themselves.

Producer co-operatives have typically devoted themselves to extensive on-the-job training and job rotation so that workers obtain skills in a variety of areas. Further, they have been shown to have relatively low capital requirements and high productivity in contrast to more conventional firms (Levin, 1980; Jackall and Levin, forthcoming). The government could assist with financing, organization, and initial training with the same funds that would otherwise be used for public employment or private sector job subsidies. However, ultimately the youth producer co-operatives should be self-sustaining. Such firms would be developed in areas of social needs for which the private sector is not responding adequately. For example, the production of energy-saving products or manufacture and installation of solar-heating devices are prospective areas of continued market growth.

These firms could also be linked to secondary schools, training institutes, and universities by providing opportunities for part-time members and more limited ownership and voting rights. Thus some individuals could advance to full-time status upon graduation, while others would leave for full-time positions elsewhere. The firms would also benefit youth by emphasizing co-operative training and problem solving in the production and marketing spheres. Such firms would have the advantages of both creating jobs and continuing training in a flexible way that connected secondary and tertiary educational institutions to labour markets.

Summary

Since youth unemployment is not primarily an educational problem, education and training must be viewed as a part of the solution rather than its core. Rather, job creation and increased employment for the economy as a whole are the necessary conditions for addressing youth unemployment. However, various educational and training programs can give youth a greater competitive advantage relative to adults than they presently have, increasing youth employment at the expense of their older colleagues. Further, systems of paid educational leave and the encouragement of part-time work and part-time schooling combinations

can rotate existing job opportunities among a larger number of persons. Finally, bold new approaches that can create jobs at relatively low cost and combine them with further training while connecting schools to the overall labour market would have the most promise. One possibility that appears particularly promising is the youth producer co-operative, but no educational or training device should be viewed, in itself, as a major onslaught on youth unemployment.

It is important to emphasize that, in both the US and in Australia, the attack on youth unemployment has largely been a war of words. When educators and others talk of career education and the need to develop an institutional transition from school to work, there is a certain futility to their rhetoric; for, whatever the justification is of providing additional knowledge about the working world and further work experience or training, these devices do not address the fundamental issue of inadequate employment opportunities. There will be no solution to the problem of youth unemployment without more jobs, and little improvement is likely in the relatively high turnover of youth among existing jobs without greater job challenges and more opportunities for career growth rather than dead-end jobs.

Although education and training policies can be used to support the necessary preparation required for new jobs and ones with greater challenge for youth, the strategies of job creation and enrichment must come first. The persistent failure of economies that are dominated by a relatively small number of powerful, multinational, corporate entities to provide full employment and price stability has raised a much larger issue for the eighties. Can social objectives in the economic sphere be obtained without democratic control of the economy; that is, a movement towards economic democracy? (Carnoy and Shearer, 1980) Or should we continue to leave these crucial decisions to a relatively few and powerful enterprises operating on a global basis with the hope that their quest for profits is compatible with our basic societal needs for full employment, stable prices, economic growth, and social equity?

Notes

[1] There are substantial publications for each country on the general issue of youth unemployment and on its specific aspects. This literature is so voluminous that no attempt will be made to summarize it here, although pertinent citations are made in different parts of this paper. For Australia, a good summary of the situation is found in Karmel (1979). For the US, summaries are found in Freeman and Wise (1979), Adams and Mangum (1978), and Newman (1979). Societies like Australia and the US are different enough in so many aspects of their economies and educational systems that comparative studies of the causes and solutions for youth unemployment are risky. Accordingly this paper will attempt to explore general patterns for the two societies rather than make detailed comparisons. An attempt to carry out a more rigorous comparative endeavour and its hazards is found in Layard (1980) which contrasts the US and UK. See especially the criticisms of his work that follow the presentation.

[2] One issue that will not be addressed in this paper is the accuracy of unemployment rates

in reflecting unemployment. The numbers reflect only those persons who did not have employment and were looking for work at the time of the survey. Thus, they are not adjusted for persons who withdrew from the labour force because of poor prospects or persons working part-time who desired full-time work. A discussion of some of these issues across major surveys in the US is found in Freeman and Medoff (1980). Further, if youth increase their length of job search over time to obtain better jobs or take and leave jobs in relatively rapid succession to search for better employment, the effect on the unemployment rate and its interpretation become even more open to controversy. See, for example, Leighton and Mincer (1980), Hall (1980), and the comments following both articles that present critiques of their interpretations.

[3] I am indebted to Professor R.W. Connell of Macquarie University for this point.

[4] Obviously the incentives for completion of any level of schooling are related to both the opportunities for early leavers and those for graduates. If the economic returns to graduates are very high relative to those for leavers, the incentives to complete school are high. For a technical analysis of these relations, see Becker (1964).

[5] For an example of how even the most sophisticated analyses of statistical time series can lead to ambiguous results, see Wachter and Kim (1980). Analyses of the effects of federal minimum wages in the US on the employment of youth tend to lead to different conclusions, depending on whether measures of the changes in youth demography that paralleled rises in the minimum wage are included in the analysis. Thus studies that find a negative impact of rises in the minimum wage on youth employment omit a measure of increases in youth cohorts, and those that find no impact include such a measure. See US Congressional Budget Office (1976:33–39).

[6] According to the Australian Bureau of Statistics, the absolute number of 15- to 19-year-olds is declining at present, with no obvious impact on unemployment rates. See Australia. Committee of Inquiry into Education and Training (1979:Vol. 1, 587).

[7] It is also noteworthy that the US labour market has been able to deal with a tripling in the proportion of the population that has been seeking work in the summer for the first time, without an appreciable increase in unemployment rates. See Wachter and Kim (1980:16–21).

[8] See note [5] on the varying estimates of effects of minimum wages on unemployment. Even if it is assumed that the largest estimated effects are valid (a dubious assumption), they would explain only a small proportion of youth unemployment. For example, Ragan (1977) estimated that the increase of the minimum wage in 1966 in the US caused unemployment rates for white teenagers to be almost four percentage points higher and for black teenagers about three percentage points higher in 1972 than in the absence of that rise in the minimum wage. This estimate would have left over 70 per cent of the unemployment rate of white teenagers and almost 90 per cent of the unemployment rate of black teenagers to be explained by other factors. See also Lovell (1972).

[9] The assumption that skill levels for satisfactory performance in an occupation are rising is highly controversial. What empirical evidence does exist tends to support the opposite conclusion. See, for example, Bright (1966), Rumberger (1981), Braverman (1974), and Berg, Freedman, and Freeman (1978).

[10] ibid.

[11] For example, even when test scores are found to be related statistically to employment success and earnings, the relation seems rather trivial. For example, a recent US study found that an increase in student test scores of one standard deviation (from the 50th percentile to the 84th percentile) was associated with a wage rate that was about 3 per cent higher and about one additional week of employment annually. See Meyer and Wise (1980).

[12] This is clearly the conclusion of studies on the overall youth labour market such as Clark and Summers (1980) and US Department of Labor (1979).

[13] The average increases in price levels between 1970-78 for Australia and the US were 12.8 and 6.8 per cent respectively. See World Bank (1980:111).

[14] For analyses of both expansion of public sector jobs and subsidized jobs in the private sector see the essays in Palmer (1978) and Bishop and Haveman (1978).

[15] Possibly the shifting of the unduly high unemployment burden of non-whites to whites might be desirable, even if an overall reduction in unemployment cannot be attained. It should be noted that since non-whites are a smaller proportion of the population than whites, a large reduction in non-white unemployment in the US could be done with only a small increase in white unemployment. The absurdity of all this is in its debate over how to share the shortage of jobs, where the shortage itself is taken for granted.

[16] It is remarkable how much the public-policy solution for youth is still focused on education and training programs, given their relatively dismal past and the fact that, even if they are successful, they are likely only to redistribute the unemployment from youth to adults. For present initiatives in Australia, see Carrick and Viner (1979) and their proposal, A Comprehensive Policy for Transition from School to Work. For the US, see the Youth Employment Act that was wending its way through Congress in Autumn 1980. The latest version at the time that this paper was being drafted was printed in *Congressional Record*, 27 September 1980. The rather depressing record of educational and training programs for the disadvantaged with respect to improving their economic status for the first ten years of the War on Poverty are reviewed in Levin (1977).

[17] This tends to be recognized by many policy makers, but the political attractiveness of training and education tend to push public policy in that direction. See, for example, the options set out by the US Congressional Budget Office (1976). The education and training solution has certain attractive qualities, such as the ideological one of helping youth to help themselves and implicitly placing the blame on youth for their own failure to find work until they are properly trained. In contrast, policies of job creation are expensive, interfere with the private market, and tend to place blame on the society and its economic system for not creating enough jobs for all who wish to work at reasonable wages. See Harrington (1980) and Thurow (1980). A more optimistic view is given in National Council on Employment Policy (1980).

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15

Education For a Complete Life

E.L. Boyer

Several years ago, the Aspen Institute for Humanistic Studies convened a seminar on the topic, 'What is an educated person?' Despite the fact that the participants were among the world's most erudite and thoughtful people, the conference was an atypically bruising incident in Aspen history — which is generally characterized by goodwill and gentility. After four days of discussion, everyone agreed in principle that education is a splendid thing, but when it came to deciding specifics great battles raged.

Few issues cause such intractable controversy. This controversy should not be surprising. The purposes of education, after all, are inextricably related to the purposes of life itself and, when asked to think about the meaning of education, we are being asked, in effect, to expose our own most fundamental values. It is understandable that education, like religion, stirs deep intensity very quickly. Harvard University Professor Jerome Kagan once said that, when searching for the definition of an educated person, one must make choices about certain transcendent human qualities to which we are committed, and that is extremely difficult. Our view of education, that is to say, reflects to a considerable degree the priorities we assign to living.

The history of the idea of education illustrates this point. In ancient times, education was what many today would label — pejoratively — elitist. The goal was to prepare the privileged for their God-given station on the earth. Chaucer's knight, who epitomized this special status, learned not only the use of arms, but music, dancing, drawing, and the arts of speech as well. In the aristocratic view of education, which was perhaps best reflected in the 18th century, the mind was to be not only trained but also polished. The educated person in the aristocratic context learned the art of civilized social interaction, not only in the public as-

semblies but in private clubs and in drawing rooms — a process beautifully reflected in Lord Chesterton's letters and in the generous servility of Tom Jones.

A rather different view of education, which might be called the civic view, emphasized the notion that an educated man is a model citizen and a servant of the state. The idea of education for citizenship appeared first in the Greek *polis;* it reappeared in Rome and again during the Renaissance; and it has remained a prominent strain in modern thought as well. In the first half of the 20th century, one of the central justifications for the public schools in the United States was the concept of education for democracy. It was education deeply rooted in the long history of the civic ideal. According to this view, men and women are political animals, people whose potentialities are realized as they are socialized and they participate in the life of the community and as their individual talents are subordinated to the common good.

A sharply contrasting view of education focused not on the state but, quite to the contrary, on the perfection of the individual. Plato, for example, urged the wise men of his day to renounce politics and to turn instead to what he called the city within one's self. Plato urged the educated person to cultivate his own garden. Similarly, Seneca urged the avoidance of public affairs, favouring instead what he called the sacred and sublime studies which reveal the substance, the will, the environment, and the shape of God. Education, according to such a view, teaches the destiny that awaits the soul. Curiously, it was the Christian influence that shifted the ideal of education away from self-nurturing and self-refinement to a more utilitarian and practical view. Christian educators drew a clear distinction between the aims of education and the aims of men — a distinction that Cardinal Newman made explicit when he argued that knowledge is one thing but virtue is another. Good sense, he said, is not conscience; refinement is not humility; and philosophy, however profound, gives no command over the passions. Education, Cardinal Newman argued, may help you get along in life, but it will not lead to virtue nor to salvation.

This breathless leap through history should underscore one central point. Education has always reflected the mood and the vision of the time, and the view of the purpose of education has always been linked inevitably to the perceived purpose of life itself. It clearly follows that, in the 1980s as always, we cannot talk about education for a complete life without exploring the emerging values and social forces that are at work today. There are four modern conditions which promise to have a powerful impact on the future of formal education and which will inevitably shape our future definition of education for a complete life.

First, because of rising expectations, the demand for education will continue to increase around the world. Education for a complete life will come to be defined socially, and what it will mean is education for the common good. In the decades just ahead, more and more people will

begin to view education not just as a right but as a privilege; the wave of educational commitments that began after World War II will of necessity continue to grow. Education will become a universal dream for the first time in history. Today, in most developed nations of the world, 10 to 12 years of formal schooling are considered essential — compared with the 6 to 8 years that were considered essential 50 years ago. Even the completion of secondary education seems painfully restrictive for those who are expected to live their lives well beyond the year 2000. It is a rare parent who expects less, rather than more, education for his child; and it is with great caution that we should impose stricter limitations on others than on those we know and love.

During the last half of the 20th century, education has become so closely identified with social progress and so accepted as a ticket to personal success that the demand for more universal education will remain a central condition of our time, budgets and political parties notwithstanding. Those who are undereducated, however one might define that term, will be tragic social castoffs in a more highly educated world. This revolution of rising expectations must, therefore, be embraced by those who care about education and the quality of modern life — and it must be embraced for moral as well as political reasons. To put it even more directly, the link between increased educational opportunity and greater social equity is no hoax. There is considerable evidence, at least in the United States, to suggest that increased access to education has expanded social mobility and has provided greater economic independence for larger and larger numbers of people — people who have historically been denied education. And there is considerable evidence, too, that the social and economic costs of denying people formal education — in the form of extended unemployment — are far greater than the price we pay for letting people in.

In the end there remains one over-riding question which cannot be ignored: Is it possible to have what Lord Bullock called a plurality of excellence? In answering that question, it is important not to confuse equality of access with uniformity of experience. Society must have different kinds of schools and a variety of higher learning institutions in order to serve students with a wide variety of needs and expectations. During my tenure as chancellor of a university with 64 campuses, one of the most difficult tasks was to convince colleges that they were not universities and technical schools that they were not simply junior colleges, and to keep this upward drift towards uniformity from compromising the versatility and the variety which a diverse student population requires. In the days ahead, education for a complete life in most societies will mean expansion of opportunity, but it will inevitably and just as importantly require greater diversity of alternatives as well.

This leads to a second observation of the social landscape and its implications for education. Because of changing life styles and changing

economics, the length of education will most likely increase and the educational structure we provide will necessarily become more varied in the future. Traditionally we have divided the span of human life into discrete segments: early childhood, or the time for play; then the period devoted to full-time education; next the segment taken up with full-time work; and finally the period characterized by some as dignified decline. In this traditional pattern, the stages of existence were strictly separated one from the other. It seems quite clear that today, in most developed countries, this pattern has begun to change. In the United States, about 40 per cent of all boys and girls now enrol in pre-school programs before they enter kindergarten, and this trend has arisen in the absence of any national policy for pre-school education. With over half of today's mothers employed, children are increasingly engaging in some sort of pre-school education or socialization program. Thousands of our children now watch Sesame Street, and the rigid line between the so-called play years and the school years is now blurred.

Increasingly, too, university students are working part-time, or completely deferring their studies, trying apparently to break out of what seems like a timeless period of incubation. In the United States today, over 55 per cent of all students enrolled in post-secondary education are part-time, not full-time, students. Clearly the parameters of higher education have become considerably blurred and, to add to this confusion, the neat and tidy adult world is beginning to disintegrate. In 1900, the average American's work week was 62 hours; in 1945, it had dropped to 43; and today the average work week is 37.5 hours. Life expectancy increased from 47 years in 1900 to 71 years in 1973, and it is estimated that, by the year 2000, 30 per cent of the American population will be over 50 years of age. It seems quite clear that traditional life patterns are increasingly being rearranged. Older people now retire earlier, live longer, and have more free time. For the first time in our history, education is coming to be viewed not only as a pre-work ritual but as a lifelong process which can and will be pursued from age 5 to age 85.

We have built an educational system to fit the rigid life cycle of the past — an education system which serves principally the young and the unattached. But the traditional life-cycle pattern will no longer endure and education for a complete life will, for most adults, mean education throughout life. This will require more flexibility both in the structure and in the content of formal education. As the lifelong learning pattern becomes more flexible, it will have a serious impact on the pre-adult structure of schooling. We can anticipate more flexibility as we anticipate and prepare for continuing education. I have proposed, for example, that perhaps our own 12-year pre-college sequence might be restructured into a three-part preparatory program: four years of the basic school, in which we focused entirely on the fundamentals of language and computation; then four to five years of 'common school', in which we would work on

the common core curriculum with students; and finally a new kind of upper-level school called the 'transition school', in which our young people would self-consciously take time to bridge from formal schooling into apprenticeships. The content and the structure of that traditional schooling would be planned not just by educators but by business leaders, parents, and the community as a whole. A transition school is urgently needed for the upper adolescent years because at that age young people are both students and adults and the deviation is usually abrupt and unplanned.

A third major development with implications for education is the recent revolution in communication technology. With access to new technology and expanded mass communication, students will increasingly be taught by non-traditional educators and often outside the traditional school. Forty years ago, the average family had no television; some had radios, and a few had automobiles that with a bit of luck could take them 50 miles from home. In those days, the teacher and classroom were a student's window on the world; formal education had no competitors. Today, in America, children are watching 4.5 hours of television daily, before they even begin their formal schooling. Before they have seen a teacher, they have 6000 hours of TV viewing to their credit. By the time they graduate from secondary school, young people will have watched television for 16 000 hours, compared with only 11 000 in the classroom. Complicating the picture, according to Christopher Evans, author of *The Micro Millenium,* is the impact of yet another form of language, the language of computers. He argues that during the 1980s the book will begin a slow but steady slide into oblivion; computers will take over because they store more information and because their information can be more readily retrieved. In the future, Evans argues, books will be tiny silicon chips which can be slipped into small projectors and read from viewing screens against the wall or ceiling.

We are confronting a new kind of revolution, a communication revolution, that is just as powerful in its force as were the industrial and navigational revolutions. The control of communication is now essentially the control of power. The non-traditional teachers in our culture, those who control information outside the formal educational settings, are having an impact on the coming generation and on formal schooling in ways we hardly comprehend. A recent survey revealed that, 20 years ago in the United States, teenagers reported that they were most influenced by their parents, secondly by their teachers, and thirdly by their peers. In 1980 teenagers reported that they were influenced primarily by their peers, secondly by their parents, and thirdly by television. In 20 years television has jumped from eighth to third in influence, while classroom teachers have dropped from second to fourth. In my view, classroom teachers are losing both authority and prestige because many students are too smart

too soon. Students feel that they can contend with the symbols of authority on their own terms.

The strength of traditional and non-traditional teachers in our culture must somehow be combined. Television, calculators, and computers cannot and will not make discriminating judgments; they cannot nor will they teach students wisdom; and I am convinced that we must have schools where priorities are set, where classrooms provide group learning, and where teachers can serve as models and demonstrate first hand what scholarship is all about. However it is important not to be beguiled or tempted into false battles. The challenge of the future is not to fight technology, which is a losing battle, nor is the challenge of the future to co-opt technology for the classroom. The challenge is to teach about technology, to be aware of its power and limitations, then to develop a partnership from strength by drawing on the best from both traditional and non-traditional education. Teachers are not communication specialists; and the communication specialists are not educators. How can the strength of both be reinforced?

Moreover we have to recognize that unguided technology could increase rather than decrease the prospects of unfair discrimination. It is possible that the development of certain sophisticated technologies will increase and widen the gap between those who have knowledge and those who do not, which raises the possibility of a new kind of oppression in which the high priests of information will control the uninformed. It is a great irony that, at the very time when information is exploding, we run the risk of having relatively few people in control of the centres of information and thus of developing a new serfdom built on ignorance.

I have explored the matter of communication in some depth in order to make one essential point. I am convinced that communication is increasing at a sweeping pace and that students are being taught by teachers who are moving far beyond the schools. The evidence seems to suggest that the informal teachers — peers and television — are becoming more influential than formal teachers — parents, churches, and classroom teachers. I believe, therefore, that we cannot talk about education for a complete life in the days ahead without finding ways to relate traditional and non-traditional education.

Thus far I have discussed education in the context of rising educational expectations, and I have suggested that education increasingly will be viewed as a process that never ends. I have predicted that the teachers of tomorrow will be both traditional and non-traditional. But what about the substance? Can education in fact lead to something we call completeness, not just in a societal sense but in a personal sense as well. In conference after conference, we talk about the means and the structures and the forms and the aspirations of education, but we rarely talk about its substance. We somehow are frightened of its content. In the United States, it has been 20 years since we have had a serious report about secondary

education — James Conant's — that discusses *what* we should teach.

As a final point I would like to discuss the curriculum that is necessary for a complete life. I believe in the days ahead our definition of what we call the core curriculum in formal education will change. I believe we will move beyond the traditional subjects, without discarding them, and we will increasingly look for a central integrating purpose of education — an integrating purpose, as I would define it, that will help all students gain perspective and see themselves in relation to other people, other times, and other forms of life. This is my definition of the core curriculum. We confront a world where all actions are inextricably interlocked, and yet many students do not see these connections. It is sobering — even frightening — to confront people who limit their world to what they can see and reach; if that is the nature of our wisdom of life, we are in for a brutal rude awakening. We have lots of subjects in the curriculum, but there is no integrated theme; we have information but no purpose. Today, at many educational institutions, the only things students seem to have in common are their differences. There is no agreement about what it means to be an educated person, and many teachers and students are more confident about the form of education than they are about its substance.

While we are, indeed, a diverse people, we do have a common heritage, a common contemporary agenda, and a common future in the broadest sense; and we simply cannot afford a generation that fails to see or care about connections. I acknowledge the diversity of students, and defend electives and independent choices. I also believe just as deeply that we share some things in common and that all of us must come to understand that we are not only autonomous and self-centred individuals, but also members of a larger community to which we are accountable and connected. There is no single prescribed curriculum which will reinforce this sense of community, but I believe that, through a properly structured study of our common need for language, our common heritage, our common social institutions, and our prospects for the future, through these narrow gates of academic disciplines, we can suggest a larger truth regarding our connectiveness here on earth.

Lewis Thomas wrote recently in *Lives of the Cell* that all sorts of things seem to be turning out wrong and the century seems to be slipping through our fingers with almost all purposes unfulfilled. One thing that is wrong with us and eats away at us is that we do not know enough about ourselves. We are ignorant about how we work and about where we fit in. Thomas concludes by saying that most of all we are ignorant about 'the enormous imponderable system of life in which we are all imbedded as working parts'. I suggest that in the future the curriculum of the schools inevitably will come to terms with this reality. The core curriculum will have one central integrative purpose, built on the disciplines but not constrained by them, namely to help students better understand that enormous imponderable system of life in which we are all imbedded as work-

ing parts. I think the urgency of the social context will force the schools to begin to educate increasingly about the reality of this world.

During the month of August 1937, the New Education Fellowship held a regional conference in Australia under the sponsorship of the ACER. The proceedings of that conference were published under the title *Education for Complete Living* and I suspect that publication was the inspiration for my rather open-ended assignment. The preface in those proceedings included the following statement:

> The material progress of the world has been such that millions of people have been released from the necessity for giving all their time and energy to secure a mere livelihood. Universal schooling and increased leisure for adults provide an opportunity for raising the general level of human life to heights never before attained.

Then the question, a kind of sobering undertow, was introduced:

> But what kind of life, individual and social, should we aim at and what procedures should we adopt in order to realize these aims? These questions constitute today's challenge to education.

Frank Tate, who was president of the ACER at that time, gave a partial answer to these enduring questions when he wrote in the introduction as follows:

> Education should enable the right pupils to receive the right education from the right teachers in the right schools under conditions which will enable the pupils best to profit from their learning.

Is there anyone who would challenge Tate's definition? The only problem then, as now, is what is right. I have suggested that, because of the changing conditions of our world, the 'right pupil' means serving the many and not the few; the 'right school' means lifelong recurrent education in many settings; the 'right teacher' means a closer link between the traditional and the dramatic, non-traditional teachers; and the 'right education' means giving students a better understanding of our interdependence on the planet earth.

16

Societal Change and Its Implications for Educational Research in Australia

John P. Keeves

The past decade has been one of planned evolution of educational research in Australia. The establishment of the Australian Advisory Committee for Research and Development in Education (AACRDE) brought increased financial support for educational research in this country. The subsequent restructuring of the AACRDE into the Education Research and Development Committee led to an extension of governmental involvement in educational research together with a greater coordination of research effort.

These changes in educational research in Australia have paralleled growth in educational research in many countries of the western world. As a consequence of this growth, the research communities in the different countries, as in Australia, have established strong and vigorous associations of educational research workers. These associations have played an important part in the development of research and an increased co-operation among research workers.

In Australia, as in other countries, there has been an impressive accumulation of educational research findings flowing from the increased financial support available, which has resulted in increased numbers of research workers undertaking investigations. In addition, more generous funding of educational research has enabled more substantial studies to be carried out. The publication by the National Academy of Education in the United States of *Impact of Research on Education: Some Case Studies,* edited by Patrick Suppes (1978), has shown that it is no longer possible for observers to state that the results of research in education are of little significance. However, it is clear that much of the work that has been undertaken is fragmented, somewhat erratic, and in urgent need of consolidation into coherent bodies of knowledge.

The apparent failure to develop an integrated and organized collection

of research findings is not surprising. The bringing together of studies undertaken under different conditions and circumstances requires new skills and new procedures. Some new techniques have recently emerged and the procedures employed in meta-analysis, developed by Glass (1976) and his co-workers, have established order and coherence in areas which were previously contradictory and confused. More work is needed. However, the accumulated findings of research are not readily interpreted without new paradigms and new theories; and the challenging task ahead is the integration of the findings of research, drawn from all parts of the world, to provide coherent bodies of knowledge about education.

At this point, it is necessary to digress from the main questions to be asked concerning new directions for educational research in Australia which arise as a consequence of societal change. We must consider first the manner in which new paradigms and theories emerge in educational research, how new directions are found, how new lines of investigation can be identified, and how new strategies which permit different kinds of research to be carried out are developed.

Forces Influencing the Direction of Research

In attempting to identify forces that influence the direction of research in education, I have been guided in my thinking by an important book published in 1947 by J.B. Conant, *On Understanding Science,* and by the series of more detailed case studies that he reported and discussed on the evolution of scientific thought. While education cannot be seen as a body of knowledge or as a science standing on its own, it would seem that research into educational questions is concerned with processes similar to those employed in other fields of scientific inquiry, particularly on the behavioural and social sciences, and involves the accumulating of knowledge about matters relating to education.

The Cross-disciplinary Nature of Educational Research

An understanding of the processes of education comes from knowledge derived from several disciplines, each contributing according to the nature of the issues under consideration. The expansion of educational research over the past decade has been accompanied by the entry of scholars from sociology, demography, and the political sciences into the field, each bringing with him understandings and procedures employed in those disciplines. These new approaches have been combined with the more traditional approaches of psychology to provide alternative theories on how children learn and how schools function. More recently, ethnographic procedures developed and employed by anthropologists have been advanced as being appropriate for obtaining an understanding of the operation of an individual school.

New paradigms and strategies for educational research have evolved and will continue to evolve from cross-fertilization with other disciplines, as developments in these disciplines are seen to apply to educational problems. However, there is a danger that research workers in other disciplines who are investigating educational questions, will become isolated from the mainstream of educational thinking by preferring to work within their own disciplinary setting. Thus the theories and paradigms they employ may not enrich the thinking of educational research workers or alternatively may not be modified and refined by the contribution of those more closely related to educational practice. It is essential that the interdisciplinary nature of research into educational problems be acknowledged, that the need to attract creative and imaginative research workers from the behavioural and social sciences to work with educators on the study of educational problems be recognized, and that provision for interaction across disciplines be maintained and extended.

Research in Response to Critical Issues

New thrusts in educational research commonly arise in response to critical issues. For example, in the early 1970s, both in Australia and in other countries, the increased retention of students at school led to an initial wave of interest in the development of more effective programs for the transition of youth from dependence on their home and school to participation in an adult world. The Commission of Inquiry into Poverty in Australia in its investigation of educational issues considered these matters, and a research report, *Youth Needs and Public Policies* (Wright and Headlam, 1976), provided an initial examination of the problems which then existed. More recently, increased general unemployment, arising as a consequence of structural changes in the Australian and world economies, has resulted in substantial numbers of youth being unable to find appropriate work. This problem would appear to be of such magnitude and permanence as to demand that a program of research in education should be maintained to investigate those aspects of the problem that are amenable to research. The immediate issue of concern is that of youth unemployment. The long-term problem is that of the transition of youth from dependence on the family to a position in adult society. The issues, when restated in this way, cease to be a search for policies and practices that will ameliorate the hardships confronting youth under specific circumstances. The task facing educational and social science research workers involves a very substantial problem concerned with the introduction of youth into a constructive adult role in a society that has changed markedly in recent decades.

The Impact of Technology on Research and Practice

Certain procedures employed in educational research have, over the past 10 to 15 years, undergone a very significant change as a consequence of

the availability of high-speed computers for the analysis of data. Some of the statistical and analytical techniques that have become widely used over the past decade were available 50 years ago. However, until the mid-1960s, it was not possible to undertake the necessary analyses either with speed or with sufficient accuracy for the procedures to be used in situations other than those that merely illustrated the possibility of application to educational problems. It is not the speed or facility with which calculations can be carried out that has been important, but rather that the new technology has promoted new ways of thinking about educational and social problems. Formerly, statistical analysis in educational research was restricted to the consideration of univariate or bivariate relationships in crude form and to using, in the main, techniques that involved fairly simple approximations. The advent of the computer and the ease and accuracy with which it is able to carry out complex calculations, have shifted some of the thrust of educational research from the study of univariate and bivariate relationships to those of a multi-variate kind. In the past, many issues in educational research could not be addressed because complex problems involving many variables were not amenable to investigation. As a consequence, in the behavioural sciences, rigid practices of experimentation under tightly balanced conditions were developed. In educational research, experimentation is rarely possible. However, multi-variate relationships can now be examined by the statistical rather than the experimental control of variables. The effective use of such procedures requires the development of complex causal models, derived from theory, and the testing of such models with empirical data. As greater expertise has been acquired in the use of statistical techniques, new and more sophisticated procedures have been evolved that permit the examination of more meaningful models. Yet it is not the facility with which such models can be tested and the parameters of the models estimated that is important, but rather that the advancing of such models demands an explicit and tightly argued theory from which the models can be derived. In the long term, it will be the development of tighter theory, built on accumulated knowledge, from which models can be deduced for examination with empirical data that will lead to progress and advance in research in education and in the social and behavioural sciences.

Advances in educational research will, I suggest, take place in the same manner as they have occurred in other fields of knowledge. First, they will arise from the infusion of new ideas frequently coming from a cross-disciplinary attack on a problem; secondly, from the demand to find solutions to new problems that have arisen from changing conditions in society; and thirdly, from the impact of new technologies on the way we work and on the way we think. Thus progress is not necessarily dependent on the provision of greater resources to undertake research, although frequently the availability of sufficient resources permits the

attacking of a problem in a more appropriate way. Advances would appear to come from the interplay of these three forces of cross-disciplinary debate, emergence of new problems, and the advent of new technology. In the search for directions to be followed in educational research over the coming decade, I will attempt to indicate how these three strands have helped me to select research questions that should be pursued.

Studies of the Thought Processes of Children

A new strand of research in education is becoming established. In part it builds on the work carried out over a long period by Piaget in Geneva, but in many ways it has received new orientations from the field of information processing. The cross-disciplinary fertilization from information processing and cognitive psychology to education, together with the use of micro-computer units to present appropriate stimulus material and to record not only the nature of the response but also the time required to generate a response, would appear to hold promise for educational research. Initial work is being carried out on error patterns in simple arithmetical and reading tasks which is likely to yield substantial gains for remedial education, more particularly if errors can be related to perceptual problems or possibly to the functioning of the brain. Further work that appears to be of interest in this area is concerned with the chains of mental operations involved in the solving of problems. These mental operations are being linked to schemata or mental structures operating within the brain. At a time when there is need for increased skill in problem-solving by a wider sector of the population, studies that provide a greater understanding of how the solving of problems is carried out, and of the strategies used by more successful solvers of problems, are highly relevant.

The importance of work into the thought processes of children lies in two directions. First, children with serious learning problems can be helped to master the basic skills of literacy and numeracy so that they may take a more active part in modern society. Secondly, in the more complex field of problem-solving, if problem-solving skills can be more adequately understood, then the development of such skills which are of growing importance in our society can be undertaken. To carry out research in this area demands sustained and detailed study with individual children, as they develop skills of learning to read, to calculate, or to solve more complex problems.

Studies of School and School Learning

Ten years ago, partly as a consequence of the findings of *The Equality of Educational Opportunity* survey and some reanalyses of the data, it was being suggested by Jencks and others (1972) that what went on in schools and the educational conditions in schools made little contribution to stu-

dent learning. In the intervening years, there has been extensive research which confirms two aspects of Carroll's (1963) model of school learning, that both 'time allowed for learning' or 'opportunity to learn' and 'perseverance' or 'time on task' or 'academic learning time' are directly related to learning outcomes. There is convincing evidence from this research that what goes on in schools does make a difference to student learning.

Nevertheless there are still substantial gaps in our understanding of the factors that influence directly or indirectly both time on task and learning outcomes. Further examination of Carroll's model would indicate that there are motivational factors arising from within the student and from personal relationships between the teacher and the student that influence 'time on task', and also variables concerned with quality of instruction that influence 'rate of learning'. The fact that different aspects of time can now be seen as mediating between a range of instructional variables and learning outcomes changes the nature of the research studies that can be carried out in this area.

The lack of understanding of school learning has led to the introduction, from time to time, of a variety of approaches to teaching and learning within classrooms, such as open education and programmed learning, or to a reversion to the exclusive use of direct instruction, in search of a global strategy of instruction that is effective under all conditions. During the coming years, the new technology, including micro-computers, will most likely be made available at extremely low cost for use in schools and will provide a further alternative. The availability of complex equipment for use in school learning cannot be ignored. What is currently lacking is a coherent understanding of the factors that influence school learning, in order to identify the conditions under which such equipment is likely to facilitate learning. Furthermore, of greater importance than the hardware will be the quality of instruction and the curricular relevance of the learning materials that are used with the equipment. Knowledge of the characteristics of materials of high and low instructional quality will be essential.

While I strongly endorse statements that the new technology cannot and will not replace teachers, I believe that the next generation of students will accept the new technology with greater willingness and skill, and will accommodate to it or adapt it to their needs more readily than will their teachers. The somewhat cautious attitudes of many teachers of mathematics and science at the secondary school level to the use of electronic calculators in their classrooms serves to illustrate the rejection of an aid by some that could provide a remarkable saving of time on tasks that were formerly extremely dull, prone to error, and largely unprofitable from an educational standpoint. Already equipment is available that stores, on disc, video and audio material for use in conjunction with a home colour television set, and which together with a simple portable terminal permits a student to record his responses. Furthermore,

there is available a growing body of video-recorded educational material that could be edited and reorganized for instructional purposes in schools. The proposed use of such equipment will lead to a wide range of investigational studies. In the probable absence of a coherent theory of school learning, the research undertaken into the effective use of this material will have to be directed towards the development of a theory of learning as well as the evaluation of specific aspects of the use of the equipment.

Studies of Curriculum and Curriculum Change

The curriculum of the schools must remain in a fluid state in order to respond to changing needs and circumstances. However, in order to plan future change, it is necessary to have documented information on the curriculum as it was, as it is, and as it might be. A complicating factor is that, in many parts of Australia, the responsibility for the curriculum of the schools, which formerly rested with curriculum committees at the system level, has been delegated to individual schools and in some situations to each individual teacher within a school. As a consequence, it has become increasingly difficult to find out what is currently being taught in many Australian schools. I do not decry or express criticism of the change that has occurred from the central prescription of the syllabuses to be taught in schools, to a situation in which each school or teacher accepts responsibility for what is taught and learnt. There is, however, an important task of mapping the school curriculum in specific subject areas so that effective planning of curriculum change can take place.

The curriculum can be examined at three levels. First, the 'prescribed curriculum' is that laid down by those responsible for the specification of the curriculum in a given subject. Secondly there is the translated curriculum' which comprises that part of the curriculum in a given subject that the students in any class have had the opportunity to learn. Finally, there is the 'achieved curriculum' covering those aspects of the curriculum which the students have learnt. It can be shown that these three aspects of the curriculum while not being identical for any group of students are, in general, correlated. However, it will be the differences between the prescribed, the translated, and the achieved curriculum that are of greatest interest, because these differences will provide evidence of learning that has occurred outside the school or of learning that was expected to occur within the school but, for a variety of reasons, has not taken place.

In order to obtain information on the effective curriculum of the schools or on curriculum change, it is necessary to gather evidence from a survey of schools, teachers, and students and to record from such a survey information on the prescribed, the translated, and the achieved curriculum in a specific field. The mapping of the school curriculum in

this way, to provide evidence for debate at the systemic, school, and individual teacher levels, is a research task rather than an investigation to be carried out by those who wish to exert some control on what is happening in schools. In so far as no appropriate methodology exists at the present time for documenting the curriculum at these three levels, research studies to map the curriculum would be of considerable importance. Furthermore, it might be expected that if such a mapping could be carried out effectively to yield information of interest and relevance for curriculum construction, for the planning of a program by a school, and for the evaluation of an instructional program, then there would be the continuing task of maintaining at regular intervals a map of the curriculum of the schools. The dimensions of such a survey would need to be sufficiently large to obtain evidence with accuracy, but not so large as to intrude on the work of a large number of schools. In so far as concern for the work of the schools exists within the community, then information obtained from such surveys should also be released to the public and made available for discussion and debate.

Studies of Cost Effectiveness in Education

Since World War II, education in Australia has served rapidly increasing numbers of students. In addition, during the past decade, there has been a marked increase in the proportion of gross domestic product allocated to education. However, during this period, there has been little research within this country into the cost effectiveness of different educational programs or of the provision of educational services to different sectors. Even though education is a substantial component of the budget of each State and of the Commonwealth, surprisingly little information is available, at least for public scrutiny, on different aspects of the costs of education.

It is somewhat surprising that economists as a group have not studied in greater detail the cost effectiveness of different forms of educational provision. In part, this is a consequence of the inaccessibility of much of the data, both as a result of confused presentation as well as a general reluctance for the evidence to be made available. This is also a consequence of the fact that the products of education are generally difficult to specify, and there is little, if anything, on which to base measures of the effectiveness of educational programs. However, since the issues associated with the allocation of staff and resources to schools are of growing interest and importance, it would seem likely that economists will, in the near future, give greater attention to the problems of educational provision. There is little doubt that this will result in new strategies being introduced into educational research.

One consequence of the work, discussed earlier in connection with the Carroll model of school learning, is that 'time' is now available as a measurable intermediate product of educational effort. School achieve-

ment has been shown to be related to academic learning time on the part of the student, and academic engaged time on the part of the teacher; and these two measures of time could be used, in a way that would appear to be sound, as surrogates for other less readily measured and less tangible aspects of the educational process. As a consequence, cost effectiveness studies that in the past could not be carried out may now be undertaken with a measure of time as the surrogate for educational products.

The entry of the economist into the field of educational research will have substantial consequences for many aspects of educational policy and practice. It is probable that the problems studied and the solutions advanced will not always be concerned with or directed towards the full range of educational goals. As a consequence, it is essential that debate should take place on the nature of education, the range of its aims and objectives, and the functions that education serves in society. Such debate will in itself be beneficial. It is also possible that certain sectors in education will resist the attempts being made to examine aspects of their operation. In the long term, however, a reluctance to expose for scrutiny the operation of educational institutions will, I believe, result in the continuance of certain programs that have outlived their usefulness and in a failure to open up new programs in response to new needs and changing conditions.

Studies in the Transition from School to a Constructive Adult Life

Attention has been drawn to the problems confronting societies throughout the western world of rising youth unemployment. Furthermore, it is evident that these problems are likely to be present for several decades. The consequences of unemployment during youth cannot be denied. Each nation must necessarily develop coherent policies and programs for youth, a task made more difficult by the apparent disenchantment of youth with present-day educational institutions and by the isolation of such institutions from adult society. The existence of these problems, their importance, and their likely continuance over a long period demands that we consider the ways in which research can contribute to an understanding of the issues involved and, if possible, can provide some guidelines for future policy and practice. Solutions to the problems will evolve slowly. Thus there is a role for research of a more fundamental kind than merely evaluating particular programs or attempting to identify the consequences of specific policies, however valuable such information might be. The task for research is to attempt to understand the issues involved in terms of personality development, social psychology, and sociological thinking. As a first step, it would be desirable to undertake a series of longitudinal studies, incorporating both survey procedures and in-depth case studies, in an attempt to examine the issues involved at

both a societal and an individual level. In addition, it will be necessary to carry out studies that examine not only the forces operating at a particular time, but also how the forces change over time with respect to changing conditions arising from the introduction of new policies.

There are three domains of living that must be investigated in a program of research. It is not enough for research studies to focus solely on educational issues, or even to investigate relationships between education and work. The field of leisure and its relationships to both work and education cannot be ignored. Each of the three fields of leisure, work, and education must be considered, together with the interrelationships between them, since in the life of an individual there is a subtle interplay between activities undertaken in each area.

Leisure

No longer can we assume that clearly defined periods of a day, a week, a year, or a lifetime will be spent on the activities of education, work, or leisure. The increased probability of unemployment will mean that people for whom work is not available in a particular location will face a period of retraining or of enforced leisure which must be pursued in a constructive manner to avoid the debilitating effects of doing nothing. Some have advanced the concept of 'non-work time', thus contrasting time engaged in formal work with that which is not. But such a concept places an unwarranted emphasis on work. It does not, for example, incorporate satisfactorily such activities as part-time teaching. The use of time in voluntary service in the community, and the educative use of the mass media must also be considered. Such uses of the time available in a constructive way are important for the health and well-being of an individual.

The issue for the research worker is that of finding out how an individual learns to make the choices that will enable him to fill the hours of his day, his week, his year, or his lifetime in a manner that gives him satisfaction and that allows him to fulfil a creative role in society. With the likelihood of increased time being available for leisure during the life of an individual, there is the important question for research concerned with how schools and post-school institutions can lead people towards the creative use of leisure time. Relatively few schools in Australia have developed programs of educating for leisure, although it was possible in a recently published research report by D.W. Fox (1980) to identify some schools within this country that had developed a coherent and effective program. The schools that were described differed greatly in their situations and circumstances and in the facilities that they had available. More research is needed to investigate the effectiveness of programs provided, the characteristics of a strong leisure environment, and how individuals can be encouraged to make sound choices from among a wide range of options open to them.

I believe the approach of preparing youth for a period of unemployment, that is being advocated in some educational institutions, must be rejected. Yet the supporters of such programs within schools argue quite strongly that for some there is no option to unemployment after leaving school. Research studies that arise from the existence of such programs would be concerned with an investigation of the consequences of these programs for youth during their period at school and after.

Work

In the main, the response of the schools to changing circumstances in the transition of students from school to work has been along these lines. First, schools have introduced more extensive career guidance programs. Secondly, they have developed work experience programs that take students from the school to a work situation for relatively short periods, and thirdly they have in some cases welcomed students back to school after periods of one or two years in the workforce. Relatively few research studies have been carried out to examine the effectiveness of such programs or to determine ways in which such programs could be improved. However, these programs do relatively little to reduce the institutional isolation that the school has developed over the last few decades, an isolation that has become more and more damaging as greater proportions of the age group remain longer at school.

It is apparent that research is needed to examine the attitudes of both teachers and students towards the importance or salience of work, to determine whether involvement by a teacher in a period of employment outside an educational institution changes his attitudes to work, and whether work experience programs serve to change students' attitudes towards work. The debate on programs associated with the transition from school to work is largely uninformed and little firm evidence is available. Without doubt, sustained programs of research are needed to provide evidence on which future policies and programs can be built.

It would appear that solutions to the current problems must lie in providing real choices for individuals to engage in full-time work, part-time study or training and part-time work, or full-time study, without running the risks of total failure in either the search for employment or in obtaining certification from a program of formal study or training. The development of appropriate programs which combine part-time study and part-time work is not a task for research. There are, however, many issues for investigation. These include such questions as what combination of work and training is best pursued by individuals of specific characteristics, what type of institution should be established, or where such institutions should be located to provide effective training and to provide an appropriate link with the adult world. It would also be important to consider the characteristics of persons who should conduct such programs, since it has been argued that teachers, with generally limited experience outside

institutional environments, have relatively little understanding of the needs of students engaged partly in study and partly in work. In addition, detailed studies of youth work co-operatives would be of considerable value.

Education

It cannot be denied that the primary purpose of educational institutions is to foster the intellectual development of those who are students within them. Nevertheless, it is also clear that, in our society, schools serve other functions. These other purposes of schools are ill-defined, and rarely are attempts made to evaluate schools in terms of their effectiveness to achieve these other functions. Important tasks for research in education are the definition of the purposes of schools, the development of procedures for the investigation of the effectiveness of schools in fulfilling these different purposes, in terms of the views and attitudes developed by students working within them, and the detailed examination of alternative policies and programs within schools, including such programs as learning co-operatives.

Education, Work, and Leisure

In the comments above, each of the three domains of leisure, work, and education has been considered separately, but the interrelations between the three domains must also be studied. It would appear that sound programs linking together the three domains can only be built up in institutions with a high degree of flexibility. Thus it would be desirable to carry out comparative studies between such institutions as the Senior Colleges in the ACT, the newly formed Community Colleges in Tasmania, and other institutions around Australia that have established highly innovative programs in order to learn whether these institutions have the flexibility to develop sound relationships in the lives of their students between education, work, and leisure.

A Problem in Educational Measurement

Underlying the disillusionment with school and schooling referred to by Professor Husén (1980), in *The School in Question* is, I believe, a strong dissatisfaction with the lock-step instructional practices of schools. In part these practices were associated with competition and selection, and were developed as a consequence of the restricted opportunities that existed during the first half of this century to continue with education beyond the elementary and secondary stages. However, with the greatly increased holding power of the schools through the secondary school years and with greatly increased access to post-secondary education, the need for competition and selection has gradually been reduced, if not eliminated, at most stages of schooling.

In their place there has emerged in some parts of Australia, mirroring strategies developed in the United States, an approach to student assessment based on the use of age or grade norms. The advantages of such normative testing procedures have been that they informed students, their parents, and their teachers of a student's educational progress relative to his peers as assessed by age and grade norms, rather than with respect to his immediate classroom rivals. In recent years, attempts have been made to abandon the use of normative tests and to carry out assessment to determine what a student does or does not know by using criterion-referenced testing procedures.

Glass (1978), among others, has attacked the procedures for the setting of standards in criterion-referenced testing. There would appear in his approach to be only the alternatives of using normative tests or abandoning meaningful assessment of student performance. Popham (1978), on the other hand, has rejected normative testing and seeks a viable alternative for reporting student performance by means of criterion-referenced testing. The answers will not be found by following the debate between the proponents of these two approaches. A third possibility exists. It has been shown that specific aspects of school achievement can be mapped on a scale with an underlying latent trait in a manner that is largely independent of both student and item samples, so that an effective scale for the measurement and comparison of student performance is developed. This solution to the problem of measurement comes from work, initially in the field of physical measurement, by the statistician Georg Rasch. Although the solution comes, in the first instance, from another discipline, the use of the approach in educational measurement is not merely an application in the field of education.

From the work carried out so far in this field, it would seem likely that items associated with a specific domain or related to a specific criterion will either lie within a very narrow band on such a scale, or alternatively will form a defined hierarchical sequence across a narrow range of the scale. If either of these alternatives is found to exist commonly in practice, then criterion-referenced tests could be constructed which are associated with particular levels on a scale.

The advantages arising from the development of scales of this type for the assessment of student performance are that they will permit the recording of performance on a ladder of achievement related to a specific domain and also permit the recording of mastery at specific stages in learning. The former type of assessment will allow growth in achievement to be measured for any individual without involving invidious comparisons between peers. The latter type of assessment will enable a thorough diagnosis of student performance at successive stages along the scale. The way would then be clear for programs of individual instruction and assessment to be developed that would permit a student to know his

general level of performance and whether or not he had achieved mastery at any specific level.

It would be undesirable if, in the development of procedures for the measurement of student achievement in the manner outlined above, rigid instruments were used that would inhibit curriculum development. Thus procedures for the construction of appropriate tests from a suitable bank of items are required. It would appear necessary for a program of research to be undertaken to develop procedures to achieve the objectives discussed above with test materials of different types, including objective test items, constructed response items, and extended response items assessed in terms of specified criteria. However, the procedures employed must ultimately be presented in such a way that they can be used effectively by classroom teachers. This does not preclude the use of underlying measurement procedures that are complex. It merely requires that the procedures must also be capable of being presented in a relatively simple way for use by classroom teachers and of yielding measures of student achievement that are readily understood by a student and his parents.

Studies of the Educational Environment of the Home

The structure of the family has changed very considerably over the past decade. Not only has completed family size fallen significantly, with possible gains for school achievement if spacing of children within the family is adequate, but the single-parent family, arising from separation of husband and wife, has also become relatively common.

Research studies conducted over the past 20 years have established the importance of status characteristics as predictors of student achievement at school, and a relatively limited number of studies concerned with variables assessing the attitudes and processes of the home have helped establish the influence of such characteristics of the home for the level of school achievement of the child. Furthermore, a range of home-based intervention programs has indicated that not only are substantial initial gains made with respect to children's educational activities, but that these gains seem to be sustained several years after the intervention programs have been discontinued.

Nevertheless, there is relatively little evidence to indicate the consequences of the single-parent family for the development of the personality of the child or for the learning of the child both inside and outside the home. What is currently lacking is a coherent body of knowledge on the way in which the processes of the home relate not only to school achievement but also to other developed traits of the child, including attitudes, values, and certain personality characteristics. The types of studies required would seem to involve an investigation of the teaching and modelling behaviour of parents, both father and mother, with male and female children at successive stages in their lives, together with studies of

how the single parent can compensate for the absence of the teaching and modelling behaviour of a missing parent. From such research would come further knowledge and understanding of how the home environment can be enriched or supplemented by intervention programs and in other ways. The desire of parents, in the main, to provide as best they can for their children is rarely in doubt. What appears to be lacking is a knowledge of how they may do this most successfully.

Conclusion

In this paper, I have sought to identify several areas in which educational research should be pursued actively in the future. The areas are derived in part from major problems confronting Australian society. However, it has also been possible to identify areas where gains are likely from a cross-disciplinary attack on a problem and thus from the injection of new strategies and new understandings, or from recent technological developments which enable current problems to be tackled in new ways with greater accuracy of measurement and with greater validity of the data collected. There are many further areas in which problems of some significance might be found.

It is important to recognize that educational research cannot provide answers to all educational problems. What it can do is provide evidence which leads to accumulated knowledge and thus to a soundly based understanding of the processes of education. It is this accumulated knowledge and the understanding that derives from it that will provide the firm basis for the making of decisions in the field of education.

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17

The Implications of Societal Change for the Curriculum

Malcolm Skilbeck

I shall start with my favourite quotation from Hegel: 'The Owl of Minerva takes flight only when the shades of night have drawn'. That tells us something about the relationship of theory to practice. The shades of this conference are now drawing whereas the Owl of Minerva is fluttering around with broken wings in the fog, or so it may appear to those who are trying to draw the threads together. The days of clarity in education and society relationships have been replaced by days of obscurity and uncertainty. Nevertheless, although I find myself caught up in that obscurity and uncertainty, I am grateful to the Australian Council for Educational Research for the invitation to take part in the conference and to focus my concerns on implications of societal change for the curriculum.

Scope of the Topic

Our topic is truly vast. Think about the terms used in the title: 'curriculum'. We all believe we know what curriculum is, yet the uses in English vary from 'syllabus' to 'experience'. The broadening of the concept of curriculum from syllabus to experience represents or symbolizes a vast change in educational thinking and is not just another example of the linguistic looseness of English. The scope of what we understand by education, its concerns and responsibilities, has dramatically widened. We may put much of that down to the impact of progressive educational thinking. Some people say that progressive education has not had much effect. It certainly has had an effect in transforming people's notions of what the curriculum is and the concerns towards which it should be directed (Connell, 1980).

The focus of this conference is on the social perspective or, more precisely, a societal perspective on the curriculum. Our present concern is not so much with individual experience as with a social view or a social dimension of the curriculum. It will help us to concentrate on that point of

view if we dismiss notions that curriculum change consists merely of renewing, replacing, or substituting syllabuses, texts, and other material resources. Curriculum change certainly includes those things, but our interest in this conference is in viewing curriculum change as itself a form of social change, both within the school and in its impact on society, not to mention the impact of social change on curriculum itself.

My general approach may be illustrated in the Australian setting by reference to the controversy in Queensland about the Social Education Materials Project (SEMP). These are materials developed by Australian educators, including Queensland educators sponsored by their State Department of Education. The materials are seen by some people in the State to be a little provocative, even to be challenging some aspects of the social order. Therefore they were banned by fiat of the Premier and they remain banned despite a recommendation for their acceptance by a parliamentary Select Committee chaired by Mr Michael Ahern (1980), now a Minister in the Queensland Government (Gowers and Scott, 1979; Scott and Scott, 1980; Smith and Knight, 1978).

When talking about curriculum change, we are not talking only about the perhaps socially innocuous substitution of one form of knowledge for another or one set of techniques for another. We are also talking about the potential impact of our assumptions, ideas, and development activities on large sectors of our society. Curriculum change entails the provision or utilization of various structures and supports. For example, curriculum change necessarily carries with it implications for changes in teaching and changes in teachers; the concept of teacher development is integral, in a broad-based strategy of change, with that of curriculum development. Likewise the structure of the school or the educational institution is implicated in any effective curriculum change strategy. Indeed one of our problems in Australia today is that, despite our knowledge, in our actions we tend to address these various dimensions of the educational development process from limited and particular standpoints. The organization that I represent is a *Curriculum* Development Centre (CDC): it is not a teacher development centre and it does not concern itself basically with structures and organizational processes in schools. But if it were to be truly effective it would need to do that.

I have drawn to your attention some of the aspects of 'curriculum', which will give you reason to understand why I find the topic a little puzzling and difficult. Before proceeding with that, let us look at the notion of societal change. The use of 'societal', in preference to the more common 'social' is interesting. We are not talking about the abstractions or mechanics of social change as such but of societal change: it is change in the whole society, of the whole society, this society, this society now, presumably, that we are addressing.

I was at first somewhat negative when I thought about that, because it seemed to me that the title was suggesting that the society changes,

therefore the curriculum changes. Several of the analyses in the background papers seem to rest easy with this assumption. Do we not need to ask the question, *should* the curriculum change if society changes and, if so, in what respect? I also raise the possibility that perhaps society should change in response to educational change: that issue has surfaced in the course of the conference.

A problem that we are faced with, and this is important for curriculum workers, is that the subject of societal change is prone to generalizations, to reifications, and even to mystifications. To quote from an article in *The Australian* that John Bremer put in my hands earlier this morning, 'After all', he says, 'who knows where we are?' It is a good question, asked by the Venerable Bede and by Gauguin: 'Who are we? Where have we come from? Where are we going?' Curriculum workers, when they are faced with the task of relating curriculum to societal change, need to address themselves to such questions. Moreover they need to find ways of bringing the broad generalizations that are often offered by way of answer down to something as concrete and as immediate as a change in the school curriculum.

A related problem about the discussion of implications of societal change for curriculum workers and indeed for educators generally can be illustrated by reference to work that was done in Japan some years ago by Herman Kahn of the Hudson Institute. Kahn produced a document concerning the future of Japan which coincided remarkably in its general thrust and direction with a publication that was issued over the name of the then Japanese Prime Minister, Mr Tanaka (1972). Mr Tanaka, you might know, is at present under investigation for his involvement in the Lockheed scandal. The book that he produced only a few years ago on the Japanese archipelago and its development for the remainder of the century reads now like a fantasy of the diseased political and scientific imagination. Kahn's predictions for the future of Japan have been almost totally disproved, at least in the medium run. You might recall that Kahn has been in Australia recently offering predictions for our future. What I am driving at is that there are real risks of politicization in some kinds of analyses of societal change. Given that curriculum has become a prominent part of the public concern over education and is beginning to be an object of direct political interest in our country, educators have to be sensitive to the misuse that can be made of some forms of supposedly predictive social analysis.

Curriculum as Construct

I would like to put it to you that the curriculum itself, apart from its responsiveness to societal change, is a social construct. The experience of the curriculum that all our children undergo in schools is an experience of a social process. The institutions within which children experience curriculum, at least the designed curriculum, are themselves social institu-

tions. The curriculum often appears to us as a very obdurate social fact. Its modification is a complex task requiring co-operative effort. In order to come to terms with the approach to curriculum that I have sketched above, we have to collaborate and combine our efforts in a manner which has not been envisaged previously.

The scope, complexity, and sensitivity of analyses of social change or societal change, and scarcity of adequate resources to cope with those analyses, suggest to me the need for co-ordination of and collaboration in our further work. Whoever else needs this co-ordination, curriculum makers certainly do. I accept that there are risks in the notion of *centralized knowledge generation*, which is my preferred term to research when discussing curriculum implications of societal change. There are risks in this of excessive concentration of power and there is, we must acknowledge, great value in a variety and diversity of institutions being engaged, but I do not see the risk as so great that we cannot devote more of our efforts to collaboration in this knowledge-generation process.

I have suggested that the school curriculum is itself a social construct and a social artefact; it is a product and result of a great deal of activity in other sectors of our society. However it is more than this. I think that we can best view it as socially and culturally interactive, not as a dependent variable — the biggest dependent variable of them all in some grandiose piece of research. The Western Australian Institute paper endorses this idea, too. Nevertheless we must accept that the curriculum is, and in many ways ought to be, responsive to defined trends and needs. I have already drawn attention to some of the difficulties that arise when, in a concrete way, we try to define these trends and needs. In view of other contributions to this conference, and the volume of recent national reports, I do not need to go into detail here about the major trends and needs which have been identified in our society in recent years. I will, however, remind you of two or three things, in order to make a point about what we might term the responsive mode of curriculum planning and development.

Our attention has been drawn to the problematic multicultural character of our society, the emerging community roles in educational decision making and indeed in other parts of our social system, the pace and direction of technological change, rapid and confusing changes in the job market, and Australia's geo-political and economic roles in South East Asia and the Pacific. I would add to these something which has not been talked about very much but which to me is an important dimension of social change, namely the move from absolutism to pluralism and relativism in knowledge and values. The latter is important because if we regard curriculum as — whatever else it may be — concerned with forms and structures of knowledge, the question of the status of knowledge is undoubtedly a fundamental one for curriculum makers. A very interesting situation in our society — as in other western-style societies over the

past 100 years — is that, in theory of knowledge, value sciences, physical, biological, and social sciences, and in the intellectual disciplines generally, there has been a transformation of absolutist and atomistic approaches, and the tide of relativism has risen. This has been reinforced in recent years by critical theory in the social sciences (Dewey, 1966; Habermas, 1971; Lakatos and Musgrave, 1970; Marcuse, 1964). Other parts of our social order have not kept pace with these dramatic changes in the disciplines of knowledge. One of the reasons why SEMP was banned in Queensland is that the fundamentalist campaigner Rona Joyner correctly detected that relativism is at the heart of SEMP. Her philosophy being a form of primitive absolutism, and her mission being to quell the tides of relativism, she did what she could to ensure that she had support in Queensland. Moreover she succeeded. The challenge which modern intellectual and scientific life has thrown out has not been fully assimilated in our society, and the curriculum, the school curriculum, is in the middle of an obscure and little understood conflict.

I see the curriculum, in accordance with my interactive stance, as itself having potential for creating and reconstructing the social and cultural orders. I cannot argue the case for that contention here, but it seems to me that the shifts I have alluded to are fundamental and decisively refute the still conventional wisdom of the curriculum as a transmission of an established order (Apple, 1979; Reynolds and Skilbeck, 1975; Skilbeck, 1980). Every time a substantial effort in curriculum making is undertaken, we are engaged in an exercise of reconstruction. Whether the exercise is effective or not is another question; nevertheless the curriculum making exercise is itself reconstructive in respect of the various matters to which it refers.

The curriculum, too, as has been made apparent in this State (Victoria. Education Department, 1980(a); (b); Hannan and Noyce, 1980) over the past few months, is a property, or can be regarded as a property. The very provocative title of the conference organized in August 1980 by teachers unions and parents organizations, 'Who owns the curriculum?' raises an important question for us today. The curriculum is a property over whose ownership and control many squabbles are taking place. I would like to repeat a remark I made at the teachers and parents conference. The question is, 'Who owns the curriculum?' The answer is the same as the answer that Brecht gave in the *Caucasian Chalk Circle* to the question, 'Who owns the land?' The land belongs to whoever will do it most good. The curriculum is owned by those who will do it most good, but who are they?

The curriculum relates to the whole life in our society. The focus of my analysis is the common life of a society, namely what we share or what we might share. My interest is consequently in the common school. We cannot have a socially defined, common curriculum independently of a socially defined, managed, and publicly funded common school. This

point is either lost on many politicians at present or disregarded by them in their quest for a stratified and hierarchical social order.

I do not read the changes discussed in the conference papers, either the background or the foreground ones, or the commentaries, as heralding the demise of the public school as a central educational agency in our society. In spite of the remarks made about recurrent education, lifelong education, and the need to review radically the structure and functioning of our institutions, nobody came forward with the proposition that we should de-institutionalize the public school. The public school is here to stay, at least for a very long time to come, and its real or apparent erosion as a consequence of funding policies should be of great concern to us all. Nevertheless drastic changes in the mode of operation of the school are needed.

Let us take the common secondary school, which I think is probably the largest problem area in education at present, as an illustration of the need for reappraisal and renewal. The secondary school has become a universal mass institution by membership and, as Professor Bob Connell pointed out, a working-class institution by membership but certainly not a working-class institution by culture. The question is, 'What might or should the culture of the secondary school be, given that it has become a universal mass institution?' The curriculum of the secondary school is still largely a watered-down version of the academic regimen of some years back. In spite of efforts that we have made to revise, modify, restructure, and update the curriculum of the secondary school, its flavour is still recognizably that of academic institutions and knowledge structures which themselves have moved on from that stage of development; it is a flavour which is hardly appropriate for a mass institution.

The school itself is dissolving a little; it is moving slowly towards lifelong learning, but I could not see us waiting until we are able to get the common secondary school firmly in focus as part of the process of lifelong learning. I would not see us waiting until then to undertake the necessary reconstitution of its curriculum. I am saying, therefore, that the curriculum of the common school is a proper concern for us when we are talking about the implications of societal change. In fact it is by addressing the secondary school curriculum that we get to the heart of the matter (SC, 1980). My reading of the changes discussed in the background papers and at the conference itself is that the fundamental purposes defined for education within the liberal tradition are unchanged. I do not read any fundamental change in statements of purpose; it is the translation of these purposes into curricula for contemporary and future life that is the problem. In attempting that translation, we encounter several distractions which, while appearing to be solutions, draw our attention away from more vital needs and sap our capacity to address them.

I will mention two of the most pressing distractions in Australia at the present time. One of them is a narrow utilitarianism which says, 'Let us

set our the curriculum in terms of what is socially useful'. The other is a growing authoritarianism which says, 'We know what is useful, here it is, and that is what you are going to do; to make sure that you are doing it we will assess you in a certain fashion'. These two distractions are having a distorting effect on the school curriculum. They can be summed up in the 'back-to-basics' movement and in the conception of the core curriculum as a centrally determined and assessed set of learnings. The back-to-basics movement is something which has characterized educational debate and discussion in our country for the past several years. The core as a centrally determined and assessed set of specifications for learning is the concept which lies at the heart of the Green Paper on education which was recently issued by the Minister and the Assistant Minister in Victoria and over which there is, I am delighted to say, a heated and exciting debate in this State. Against those notions I would like to quote from Ralf Dahrendorf (1974), the Director of the London School of Economics, who said in his Reith Lectures:

> The central task of education is not simply to produce spare parts for the economic process, but to develop human abilities by opening them up for varied choices rather than streamlining them towards alleged requirements.

That statement is apposite to our situation in Australia at present because the utilitarian and authoritarian trends I have noted are directed towards that streamlining towards alleged requirements. These trends take too much for granted both as to desirable ends and means of achieving them.

Curriculum as Social and Cultural Mapping

I would now like to turn to a rather different concept of curriculum from the utilitarian authoritarian version of core which has been gaining some ground recently. It is a concept, or perhaps an approach, which looks at curriculum as a kind of map, a socio-cultural map as I like to call it, and at curriculum making as a form of social and cultural mapping. By this I mean that the definition, design, and development of the curriculum are processes of analysis, interpretation, and indeed reconstruction of the social and cultural order. Those engaged in this mapping, whether they be policy makers, educational administrators, teachers, academics, parents, or students, may be viewed as creative agencies assisting in the shaping of social and cultural change.

If curriculum is to be perceived as functioning as a kind of map and if curriculum makers are self-consciously and deliberately to act in the way I have indicated, we do need some set of pictures or overviews of the socio-cultural world, as Professor Halsey indicated in his paper. We will need pictures of desirable futures. Professor John Passmore, who has distinguished himself as one of Australia's most brilliant thinkers in his analysis of the historical development of European philosophical ideas,

looks ahead to a possible future, a subject which many philosophers are now beginning to take seriously again.

> One thing we shall hand on to posterity is problems. But we also need to hand on not only the material resources, the institutions with which posterity can confront their problems, but, more important still, the skills, the information, the enthusiasm, the imagination, the critical spirit, the courage which these problems will demand of them.

Passmore is not sure that this can be done.

> My fear at the moment is that . . . Australia may be reverting to the country I once knew — narrow-minded, nationalistic, puritanical, short-sighted, a Festival of Darkness. Doors are quietly closing, lights being silently extinguished. The bureaucrats, the accountants, are always waiting on the sidelines, ready to take over, not only inside Governments, but inside every institution. Hard-headed men they call themselves. And certainly, solid bone is hard. (Passmore, 1979:11)

This is a healthy and creative alternative to the barren and methodologically suspect exercises of the futurologists who claim to be able to predict actual futures. We need these pictures of desirable futures; we also need, as Professor Halsey said, descriptions and analyses of present imperfections. Thirdly we need to define the processes of transformation, or the means whereby we move towards these desirable futures. I number the school curriculum as one of the principal means open to us.

When we are talking about the desirable future, we should switch to the plural and consider desirable futures. We should be laying out options or alternatives since there is no one view which can claim to transcend all others. The curriculum of the school is one means whereby those options and alternatives are laid out and pictures developed elsewhere are assessed and responded to. Members of school communities, broadly defined, need practice in cultural mapping instead of being the recipients of some other group's predetermined view of the world. When talking about moving the present towards the future, we have to acknowledge that the present has its own growth momentum. We are talking about steering or guiding the growth of the present towards desirable futures. This point should take care of the rejoinder that we are preparing naive inventors of utopia. Curriculum makers at all levels in our educational system ought to be engaged in these future mapping exercises. They cannot undertake that task unaided but can show some initiative, for example, through curriculum projects of the kind CDC has embarked upon.

We must admit that it is very difficult to paint a picture of a desirable future as distinct from spelling out various trends or features or discrete items in our current social situation and extrapolating these into the future. Perhaps this difficulty partly explains the piecemeal and generally impoverished social trends analyses to be found in our major educational reports of recent years. We might make a modest start, at the school

level, by examining the curriculum to ascertain ways in which it itself has been part of the process of socio-cultural mapping. Social historians of education have helped us here (Musgrave, 1979; Connell, 1980; Bowles and Gintis, 1976; Sharp and Green, 1975; Willis, 1977). The social reconstructionists have seen curriculum as modifying and recreating the world to which it addresses itself, both in personal and social aspects. We may also see the curriculum as a source of tools, instruments, skills, dispositions, and values which have functioned to enable students to engage actively with the social world. Jean Blackburn in her paper discusses this. I strongly endorse what was said in those papers on the subject of enabling students to be activists.

I have touched upon some of the features that need to charactertize the curriculum map. I do not intend to try to produce anything resembling a complete map. We have to build co-operatively the processes and structures required, some of which have been referred to in this conference. They constitute pressing issues and concerns and our answers to those concerns need to be indicated in curriculum terms. To take one example, we need to include in our overview of the socio-cultural world some kind of desirable state under the heading of multiculturalism. That desirable state has not been created by the activities of Australian educators over the past year or two under the multicultural banner. It is a target, if you like, to work towards but it has not been at all well defined or elaborated. The map also has to include scope for the development of identity, personal, group, national and international; it has to acknowledge the reality of change; it has to acknowledge the openness of truths, values, and beliefs; it has to provide opportunities and requirements for growth and fulfilment in work, leisure, and relationships; it has to provide all students with a means whereby they can be effective actors in the world.

I can summarize through an analogy. Students need to be able to move from the condition at which they are naturally quite good at the age of four or five years in kindergarten, whereby they mould clay. Most young children have the experience of moulding lumps of clay. A piece of clay is plumped down on the table in front of them and they are told to pummel, shape, push it, to use all its plasticity to produce a shape that suits them. Now that seems to me a useful analogy for what our students should be enabled to do throughout the whole of their schooling. One of my ideal futures is that they should be in a position to do that in relation to their culture by the time they have completed education. But things turn out differently in practice. Instead of moulding clay, which they do so well at the age of five, by the age of 17 or 18 their culture has very effectively moulded them. One question therefore for curriculum designers is, 'What has happened between the ages of five and 17 or 18?' Is the moulding of the individual really what we wanted? At the age of five we seem to be clear about the need for children to mould clay, but by the age of 18 we seem to be quite prepared to accept the idea that they can be moulded by

their culture. I detect an implication of societal change for the curriculum here. Is this an implication we intended or, having observed it, want to continue?

It must be admitted that the moulded individual conforms to a commonplace view about the nature and role of the curriculum and its development in our society. First, we have the notion that the curriculum consists of orthodox subject matter, updated somewhat by being made socially responsive. We build into our orthodox subject matter the quest for social relevance, an uphill battle since it is not on this basis that the subject matter compilations are put together. Consequently our secondary schools seem to have produced, ultimately, a curriculum which is socially weak, structurally loose, divided, trivial, and intellectually feeble. This is what I call the 'dingo-fence' curriculum. The dingo-fence curriculum is strong in its divisions, lots of dingoes on one side and none on the other. However it is extremely weak in integration. Moreover all over Australia the dingo-fence is falling down; it is in a state of disrepair. Perhaps it is going to be replaced by a second metaphor, if you will forgive me, and that is the 'urban cowboy' curriculum. The urban cowboys, for those of you who have not seen the film, are a fantasy product of the south west of the United States; the urban cowboy is mindlessly responsive to consumption images and to technology, he creates a fantasy world in which, if he believes he is a cowboy or somebody else believes that he is a cowboy, he is one. Technology is used for whatever it can be used for. Bringing these strands together, the cowboy gets satisfaction from riding a bucking electronic horse. Is all this too much of a parody of the quest for relevance?

From these metaphors of our condition, I turn to the development process. Let us assume that curriculum development is somehow a product of broad educational policy decisions. In some obscure fashion, these decisions derive from overall social policy which is politically determined, I suppose, ultimately. That politically determined policy itself derives from pressure groups, the ideologies of the political parties, and various bureaucratic processes including studies which may or may not have a research base. The school curriculum in this setting appears as a technical artefact; a reflection of social reality; a product of administration, policy, and pressure; and a legacy from the past. The school curriculum is condemned because it represents a mismatch between certain assumptions, within those educational and social policy decisions, about what our society is or needs and what the schools are actually doing. The curriculum-making process is seen as one whereby we find pedagogical correlates of this determined socio-cultural reality. By that process, whereby policy structures decision making, a socio-cultural reality is defined; the job of the curriculum maker thereafter is to translate that into some kind of pedagogy. The curriculum maker is therefore a social technician. Unfortunately the whole process is condemned to futility by social

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lag, because that model has the remarkable and dismaying characteristic of condemning whatever is done by the social technician curriculum maker to lagging behind the situations which those policy processes have identified. I have contrasted that with the notion of curriculum making as itself a form of socio-cultural mapping and the curriculum maker as someone engaged in that enterprise in association with others. I offer you these two approaches as alternatives: either the curriculum as a socio-cultural map and curriculum making as mapping, or other processes which I have just outlined, which see the curriculum as somehow or other derivative of a world defined elsewhere.

There are a number of requirements to be fulfilled if we wish to give the curriculum a strong socio-cultural orientation. In order to sustain the kind of mapping that I have referred to, we need social knowledge, understanding, constructs and theories, images and analyses, pictures if you like, of possible futures. We need these to be generated, exchanged, discussed, talked, and argued about and we need them to form a central part of our analysis of the structure and control of schooling. Translated, in our curriculum terms, into what I have called maps of the socio-cultural world, they have to be synthetic in character; they have to be overviews. Exceptionally difficult to draw up, they represent a certain kind of intellectual process which much of our education does not equip us for, because naturally that kind of synthetic overview process is one which scarcely acknowledges the fences.

If the kind of map-making approach to curriculum I have outlined is to have a serious effect in schools, we have to see the teachers themselves as partners, constructors, designers, and engineers of curriculum. The notion of the teacher as a translator or a transmitter of somebody else's curriculum is quite inadequate. We need, moreover, articulations of the fundamental contemporary forms of knowledge and experience, of their scope and their inter-relatedness, to provide the powers of understanding and the skills of action which have to be built on contemporary experience. Where is this to be done? One would turn in hope to the tertiary sector but, unfortunately, it appears that few people and institutions in the tertiary sector have that kind of mission before them. It seems to me a fundamentally important educational issue. In the absence of better sources, curriculum projects and curriculum development agencies are undertaking some of the tasks I have in mind. The school, in the light of the foregoing, serves as a base for learning rather than the place where all learning takes place. What are often described as curriculum materials serve as resources for learning not as a substitute for school curriculum making or for experience. I see the students as active agents in their own learning and development (Skilbeck, 1980).

Core Curriculum for Australian Schools

What I have said thus far helps to explain why the Curriculum Develop-

ment Centre has produced a document called *Core Curriculum for Australian Schools*. I was delighted when Dr Boyer in presenting his paper talked core curriculum language, theory, and philosophy. That rang bells with me which have been ringing, too, for some time in the State of Victoria where core curriculum has become a major issue of concern and debate. It seems that we are moving into a period in Australian education when the concept of core curriculum will be of central concern; that can be a very exciting period for us.

The CDC paper is available for discussion and I will not attempt to summarize it here. In several supplementary papers, I have taken up particular aspects of our approach; other reports and studies are forthcoming (CDC, 1980; in press (a), (b), (c); Skilbeck, 1980(b), (c)).

This is not the occasion for us to go through the CDC core paper but I do wish to draw to your attention a couple of features of our approach. First, our concept of core curriculum is broadly based by contrast with the back-to-basics approach. The difference may be indicted by my saying that our definition of 'basic' and 'essential' learnings takes a wide span of knowledge, understanding, values, and actions and it is not restricted to ascertainable learnings in so-called tool subjects. We see our paper as a contribution to curriculum making conceived as a form of socio-cultural mapping. We do not see core as a fixed part of the curriculum so much as principles and processes by mastering which students learn to cope with a socio-cultural world in which they are living. To take up one of the points raised in discussion of Professor Halsey's paper, I regard the core curriculum as affirming moral imperatives, moral universals in fact, which one reaches by consideration of what it is to be an educated person in our society.

Affirming moral imperatives is not the same as indoctrinating people in answers to moral, social, or political questions. The distinction is a key one and needs to be reiterated. What we are affirming is that competence in the moral domain is essential and that is why we have included it in one of our areas of knowledge and experience, under the heading, 'Moral reasoning and action, value and belief systems'. I know that this is a large and difficult subject which we cannot address adequately now. I doubt whether we can talk sensibly about moral reasoning and action, and value and belief systems, as part of the core curriculum philosophy, unless we are prepared to affirm some moral universals, at least in the sense of a framework within which action, including inquiry and study, take place. Moral imperatives or universals are paralleled in other areas of the core. What we are saying, essentially, is that there are requirements for living a certain kind of life; the core areas of knowledge and experience within which curriculum may be mapped out.

Our core curriculum is, it will be clear, socially and culturally oriented. It is an attempt to respond to what we understand to be

significant changes in our society, the directions it is taking, and the directions that it might move in. We see it as being focused on fundamental structures for, as well as of, knowledge and for, as well as of, social action. We see it as giving access by all students to the social and cultural worlds.

Core and school-based curriculum development may be seen as aspects of a single process. We in the CDC do not see them as alternatives or as mutually exclusive, as some commentators seem to feel they may be. Core is a response to school-based curriculum development in a sense that it is a contribution to building the overall curriculum framework within which schools may exercise initiatives. More simply, it is part of the support which school-based curriculum development needs.

Core curriculum analysis does not start with an assumption of social consensus. The analysis is itself an attempt to generate such consensus as we may need and are able to achieve. The core document makes certain assertions about what is basic and essential; those assertions are of course open to debate and discussion. It makes statements about learning processes, learning environments, and substantive knowledge and experience. It offers itself as a manageable innovation. The CDC sees core curriculum in Australia as being constrained only by our capacity to organize the core and manage it, not by an unwillingness or inability to think it out. We see core as a program for research and development; we do not see it as a national outline syllabus for implementation.

There is a tendency to assume that, when a document with a title *Core Curriculum for Australian Schools* is issued, what we are being offered is a syllabus which all schools are to teach. On the contrary, what we are trying to do is address the questions of what are basic and essential in learning, what our fundamental purposes are in organizing schools, what experiences we think ought to be common to all learners in our society, and what we hope for from our schools. In order to address such questions, in a manner in which we might get some answers, we need a framework. We need a set of ideas, a set of organizers, a conceptual map if you like. Our core curriculum is proffered as such a conceptual map. So if somebody asks, 'Where is the core curriculum?' the CDC answer is that we will have thousands of variations on core curriculum. The task of translating a document like this into curriculum reality in schools is one that many will be engaged in.

It will be obvious that there are considerable risks in issuing a document with the title 'core curriculum'. The risk of being regarded as having abandoned a commitment to local autonomy, school autonomy, is one; that of being regarded as proclaiming a cramped form of the back-to-the-basics movement is another. We thought it worth running these risks, using the language of everyday life, of everyday debate and discussion about education which includes such terms as 'basic' and, now, 'core', and seeing whether we could not do something to transform that

language or rather the thinking behind it by providing a different kind of conceptual basis. Our document is thus an example of the kind of socio-cultural mapping and reconceptualizing through curriculum design which as I suggested at the beginning of my paper our curriculum making badly needs. It is only one such example. It is part of the development program which ought to extend over a number of years. Our document can be, I suppose, regarded as an invitation to the educational community in Australia and the public at large to take seriously the notion that the school curriculum does have something to do with our society and our culture, that it has a role in forming, shaping, modifying, and influencing our society and culture as well as responding to its expressed needs.

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SUMMATION

Peter Karmel

I shall divide my summation into four sections:
futures;
purposes of education;
practical prescriptions;
final message.

Futures

Futurology is a hazardous occupation. Nevertheless there are some near certainties in the scenarios for the next 20 years.

Demography

Whatever happens, population growth for the next 20 years will be slower than that for the past 20. Enrolments in primary schools will decline up to the late 1980s and then, because of a likely increase in the number of births, will probably rise temporarily. Secondary enrolments will continue to rise for a few more years, will then decline, and probably rise in the early 1990s. Tertiary enrolments will continue to increase slowly during the 1980s; so far as the 1990s are concerned, tertiary enrolments will be maintained only if participation among the older ages continues to increase.

Labour Market

Professor Halsey referred to the 'transformation of the division of labour'. This covers a range of developments in the labour market. Full-time employment of the young has been declining in absolute terms in Australia since 1966. This trend is almost certain to continue. Alongside it, there has been a great increase in part-time employment. The growth of part-time employment relates not only to the young, but to all ages,

particularly to married women. This trend also seems certain to continue. The high levels of unemployment among the young which have been evident over the past five or six years are also likely to remain with us. This is so even if the main cause is, as Professor Levin has suggested, the general slack in the economy. The economy may well become more lively, but the rate of economic growth is unlikely to be sufficient to reduce youth unemployment to the levels of the 1960s. In any event, structural factors bear some responsibility for high levels of youth unemployment, and they are likely to continue to do so. Youth unemployment is, and will continue to be, concentrated among certain groups of young people, in particular among those who left school early with low achievement and poor motivation.

Income

Changes in the division of labour are also reflected in the ways in which incomes are earned. Two-income families are common and may become increasingly so. The sole-parent family is also a phenomenon of increasing incidence. Increased part-time employment brings with it the possibility of one-and-a-half income families or of two-half-income families.

Professor Halsey's distinction between the formal and informal economies also relates to income. If the formal economy is defined as comprising those transactions which are counted in the calculation of gross domestic product, there remains a host of transactions of economic value which can be regarded as the informal economy. These include do-it-yourself activities, the bartering of services, cash received but not returned as income for tax purposes, illicit transactions, and the unpaid services of housewives. The balance between the formal and informal economies has been changing and the future may bring an increase in the significance of the informal economy. This may affect the proportion of one's lifetime that is spent working in the traditional sense. The distribution of work over people's lifetimes may change, and the significance of leisure may heighten.

Pluralism

There has for many years been an increasing tolerance of other people's values. However, this acceptance of pluralism has been of a private kind. There is now, however, a public posture that pluralism is good in itself and should be supported by governments. It is said that we now live in a multi-cultural society and that there should be institutional arrangements to support such a society. This position may well lead to conflict between the mainstream values of society and the value systems of minority groups.

Technological Change

The heightening of conflict will come not only from competing value systems, but also from technological change. The main consequence of technological change appears likely to be a sharpening of the struggle about the distribution of society's income. Quite recently a major report on technological change in Australia has become available (Myers Report). The general thesis of the Report is that technological change is inevitable and should be welcomed as a means of raising living standards and widening options. However, it will lead to some disruption, and certain adjustments following technological change may have to be softened by government action.

It is important to emphasize that the problems of technological change are not in themselves technological problems. It is the solution of technological problems that produces technological change. The real problems of technological change are human, economic, and social. The Myers Report does not face up to these problems. The *human* problems relate to what to do about displaced workers and bankrupted businesses which cannot compete with the new technology. The main *economic* question is: do the benefits out-weigh the costs? There certainly are costs, including the costs of protecting the weak. Thus, even if one is generally supportive of technological development, it is still possible to ask whether the rates at which new technologies are adopted should be influenced by subsidization of taxation. And finally there are the *social* questions, which seem to me to be the most profound and the most difficult. How much will society have to adjust in order to make living with the new technology acceptable? What measures are needed to ensure an equitable distribution of the greater production made possible by the new technology — among members of society — between work and leisure — between material goods and the quality of life? Is it really possible within our given social structure to solve these distributional problems? These issues, and indeed the problems of inflation, are vitally related to the distribution of income. They reflect deep conflicts in society and they cannot be resolved by simple nostrums.

Moreover the conflicts appear in yet another way. In spite of the deskilling of certain kinds of jobs, it seems likely that the trend towards a job structure involving, on average, a higher level of skills will continue. The decline in unskilled work has been going on for some time; for example, roads are no longer made by unskilled pick-and-shovel workers but by skilled plant operators. If this trend continues, the formal labour market will become increasingly biased against low achievers. Their productivity may well be lower than the minimum socially acceptable real wage, and this will produce the new 'under-class' referred to by Professor Husén. There have always been low achievers, but in the past there have been jobs available for them at the going rates of pay. It may become

increasingly difficult to fit these people into the labour market. If this is so, we will have to take measures either to raise their productivity or to ensure that some of the product made possible by the new technologies is distributed to them. There is also the probability that the various interest groups which struggle for their shares of the national income will ignore more than ever the interests of those who are on the fringe of the labour market. When there was high unemployment in Australia in the 1930s, the measure was 'unemployment among trade union members'. Today unemployment is concentrated among weaker groups in the community, and concern about unemployment on the part of the unions is very much less than it was 50 years ago.

General Atmosphere

The general atmosphere in which education at present operates ranges from the critical through the disillusioned to the down-right hostile. While some improvements in the climate may reasonably be expected, restraints on public spending, both as a result of deliberate economic policy and as stimulated by the tax revolt, are likely to impinge with special severity on educational expenditure. The requirements for accountability on the part of educational institutions and for relevance in the courses that they offer are likely to continue. It is worth noting that demands for accountability and relevance are to some extent mutually inconsistent. The detailed discharge of accountability requires some degree of precision in the definition of educational objectives; such precision is possible only if the objectives are narrow. Thus competency testing is a form of accountability relating to the particular objectives of minimum skills in literacy and numeracy. On the other hand, if educational institutions are to offer courses that are relevant for living in the socially complex and technologically sophisticated world of the future, they must be prepared to range widely in their activities and to function in many roles. Strict accountability in circumstances of plural objectives is almost impossible.

Purposes of Education

Institutional education as we know it has many goals and plays many roles. Consensus on the goals of education can be achieved only if the goals are generalized to the point of trivialization; otherwise there is argument, if not about the goals themselves, at least about the weights that should be attached to the various goals, many of which compete with each other. Notwithstanding this, two points can be made which are relevant to the purposes of education.

First, the education which takes place in schools, colleges or universities has two characteristics. *Education is a preparation for human activity.* I have used the term 'human activity' deliberately: I have not spoken of

education as a preparation for work. Work is only one aspect of human activity, and perhaps to become a less important one. By speaking of human activity, one generalizes the preparatory aspects of education. *Education is also a life experience.* Young people spend a considerable proportion of their waking hours in educational institutions, and it is better that they should do so willingly in a creative environment than unwillingly in sordid conditions. As was pointed out when the disadvantaged schools program was first recommended by the Interim Committee for the Schools Commission, even if additional expenditure on disadvantaged schools did not produce gains in educational achievement, it might still be worthwhile to provide a better environment for children at school.

Secondly, as Dr Boyer indicated, the relationships between the nature of society and the nature of education are close ones. Educational institutions, including the curriculum, reflect the social and technological relationships within society, and society is itself moderated by the nature of education.

Practical Prescriptions

The background and conference papers include a number of pointers to the way that we might modify our educational arrangements to meet the societal changes that lie ahead. We are unlikely to come up with a grand strategy that will solve all problems. Indeed the reconciliation of the many conflicts that exist in society, and seem likely to intensify, might involve quite radical changes in the structure of society itself. What we want are practical prescriptions which can be implemented and which form a reasonably coherent whole. I shall therefore set out a number of these prescriptions, and, in doing, draw from the papers, in particular from those of Mrs Blackburn and Dr Boyer.

Compulsory Schooling

There seems to be no support for extending the age of compulsion beyond the 15 or 16 years old limitation that is the current Australian requirement. It is, however, important to ensure that, within the 10 years of compulsory education, proper attention is directed towards basic language skills. The importance of language and communication has been emphasized by Dr Boyer. People without these skills are clearly disadvantaged in their human activities. I am not advocating 'back to the basics' in the narrow sense in which it is often interpreted. Communication skills include more than the technical skills of reading, writing, and speaking, and need to be taught in context of communication's being itself a social activity. Under modern conditions, language skills also include the language of numbers; the importance of an adequate mathematical background for living in a modern technological society should be stressed.

Mrs Blackburn suggests that the compulsory curriculum should include a study of work as a major human activity. This illustrates the importance of people understanding their relationships with each other and to the broader society. In Mrs Blackburn's words:

> Students gain little assistance in understanding the effects of technological change, why different kinds of work command different rewards and are performed under different conditions, why some important work like child-rearing is unpaid, what the role of trade unions is, how major investment decisions affecting the availability and nature of work are made.

Post-compulsion Two Years

Again, I refer to Mrs Blackburn's suggestion for the development of comprehensive two-year institutions — in Dr Boyer's terms, 'transition institutions'. Two-year institutions exist in Canberra, although they should perhaps be made more comprehensive by linking them with technical and further education (TAFE). There is evidence that the young people in Canberra in Years 11 and 12 have much more positive attitudes to their schooling than a similar group had eight years ago when they were in six-year high schools. This evidence is particularly impressive in the Canberra case, since retention to the completion of secondary school is almost 70 per cent in government schools, compared with under 30 per cent in the rest of Australia. Two-year matriculation colleges have been in operation in Tasmania for some time. Recent moves to combine these with technical colleges to form community colleges are certainly in the direction which Mrs Blackburn advocates. Any move to two-year colleges will be a major institutional change, but it may be one which can be accomplished in the coming years as secondary enrolments level out and then decline — a situation which is likely to create surplus school plant.

The development of such institutions will require a diversification of the curriculum. The adult atmosphere of two-year colleges and a diversified curriculum should encourage young people to stay longer at school. I do not want to encourage retention to the end of secondary school by compulsion — the holding of students unwillingly in school is not a desirable option. But if students can be attracted into education or training courses, so much the better. It must be remembered that participation in full-time education or training is still comparatively low in Australia for the 15- to 19-year-old group.

Apprenticeship

Complaint about the apprenticeship system in Australia has been endemic for 40 years. Not only are we dependent on the willingness of employers to accept apprentices, but the apprenticeship system provides skill training for only a limited portion of the workforce. There seems to be little reason why skills cannot be taught on a institutional basis pro-

vided sufficient opportunity is given for practical experience. Most semi-professional and professional people are trained in institutions. There would seem to be considerable advantage, at least in terms of the supply of skilled workers, in supplementing the present apprenticeship system with other forms of training. Quite apart from this, some of the problems of unemployment of the young might be resolved if young people were seeking training rather than employment. This approach would involve paying training allowances instead of wages. This applies not only in the traditional trades, but also in activities like nursing.

Employers' Responsibilities

The discussion of training raises the question of the responsibility of employers. It is not unreasonable to require employers, particularly the large ones, to maintain a balanced workforce with an appropriate proportion of training positions for young people. Such positions should not attract full wages, but should be available so that a mix of part-time training and part-time employment can develop. In West Germany, for example, such obligations are placed on employers.

Financial support

In Australia young people have access to financial support on a not ungenerous scale. A number of schemes operate but they are generally inconsistent with each other; apart from differences in benefits, there are differences in means tests and study conditions. Thus unemployment benefits are higher than tertiary education allowances, and the latter are means tested on parental income. Until quite recently, young people on unemployment benefit had no incentive to engage in part-time employment. This situation has improved with the liberalization of the requirements in the recent Budget. It is also the case that those on unemployment benefit are not permitted to study for more than six hours per week. Manpower training schemes pay significantly larger allowances than tertiary education allowances; some people are trained for specific occupations on comparatively generous wages (for example, nurses). Rationalization is called for.

With a reasonably uniform system of financial support for the young, we should be able to get the incentives right. Young people could be encouraged into training schemes of various kinds or into combinations of part-time work and part-time education/training. By these means, unemployment as such among the young would be reduced. This is not a confidence trick achieved by merely redefining the problem; rather it aims at a richer range of human activities for young people. If some young people choose neither to train nor to work, I should not wish to deprive them of that option, and some provision should be made for them. Financial support for the young might also include the subsidization of youth

activities along the lines of the youth co-operatives, mentioned by Professor Levin, and of school-based enterprises.

Recurrent Education

There would be little argument about the desirability of promoting recurrent education in the sense that people would have access to educational training programs throughout their lifetime. Indeed such a development fits in with the changes in the labour market and in income patterns to which Professor Halsey referred. In addition to recurrent education in the *vertical* sense, there is the possibility of thinking of it *horizontally,* that is to say, people might move between formal institutions of education and non-formal institutions. There are many possibilities for the development of education in non-traditional ways; for example, in the work place. There are also the opportunities for non-traditional modes of education, mentioned by Dr Boyer and Dr Scott, for example, through modern means of communication, including audio and video.

Final Message

The practical steps that I have just outlined are not, of course, a recipe for Utopia. They do not prescribe for an ideal, or even an acceptable, distribution of social activity or of income. They will not cure general unemployment or produce economic growth. They are, however, feasible prescriptions for practical problems, and they lead in the direction of fairer treatment for disadvantaged groups within society, as well as towards raising the competence of the individual in undertaking human activity. It must be recognized that the various suggestions may threaten vested interests, and they will certainly cost money.

The high hopes held for education in the 1960s and early 1970s have in some quarters been replaced by despair. Although there is present today a number of optimists of both the liberal and egalitarian pursuasions, I sense there is something of a shift to the right-hand side of Professor Halsey's diagram. The aggressive demands of the educational lobbies have now been replaced by defensive stone-walling. However, our record has not been bad and, as Mrs Blackburn pointed out, we should be willing to proclaim this.

Over the past 20 years, there have been improvements in the quality of education in this country at all levels from pre-school to university. Many aspects of education have been transformed. Access to upper-secondary education and to higher education is a great deal more liberal than it was, both in relation to socio-economic class and to age. Access may not have been broadened as much as many would have liked, but notwithstanding this there is certainly much more access. Class sizes have been greatly reduced, and training of teachers improved; the very large classes of the early 1950s have been virtually eliminated, and the one-year or two-year

trained teacher is a thing of the past. There have been reforms of the curriculum, and school-based curricula have become a reality. There have been many innovatory programs sponsored by the Schools Commission. There are innovatory schools. School libraries have developed. In spite of criticism to the contrary, university research exists to an extent barely dreamed of 20 years ago; universities as scholarly institutions are incomparably better than they were in the 1950s. I have named only a few of the developments. And it must be remembered that all these things have happened over a period when the numbers at secondary school have doubled, the numbers in TAFE institutions have trebled, the numbers at universities multiplied three-and-a-half-fold, and the numbers in advanced education five-fold. Over the same period, the proportion of gross domestic product devoted to education has doubled; it is now at the same general level as for other developed countries.

If in the next 20 years we can accomplish as much change, and adapt to as much change, as we have done in the last 20, we will do well. However, we will have to attempt this in an era when social conflict rather than economic growth predominates. This will be much more difficult. We will have to be more persistent and more understanding. If this conference has done nothing more than draw attention to these issues, it will have been well worthwhile. It is my hope that it has contributed a fragment to the great task of adjusting the requirements of society to the aspirations of its individual members, and the nature of education to the requirements of society.

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(The positions indicated are those held at the time of the Conference.)

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